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"THE CHEMISTS' AND DRUGGISTS' DIARY" FOR 1902

Is Now being Prepared.

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And buyers' guide
Every workday during the year.

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Summary.

SMALLPOX is on the increase in London (p. 525).

THE alkaloids of bloodroot have been reinvestigated. See note on p. 538.

THE results of a chemical investigation of American storax are given on p. 538.

SOME idea of what pharmacy in Ceylon is is conveyed by an illustrated article on p. 529.

THE PLAGUE has now so abated in the Cape that disinfectants are at a discount there (p. 528).

MR. S. C. GADD, of Exeter, sketches and describes a new reflux condenser for water-baths on p. 522.

THE WELLCOME C.C. has secured the Wholesale Cricket Challenge Cup for the third time (p. 523).

THE names of the candidates for the Irish Pharmaceutical Council vacancies are given on p. 525.

MR. HELBING describes in an illustrated note on p. 537 an ancient pharmacy in the Zurich Museum.

THE MAJOR EXAMINATION has been held in London this week, and the questions are referred to on p. 533.

"XRAYSER" gives us some philosophic reflections this week based upon Haeckel's last words to the human race (p. 539).

THE NEW REGULATIONS for the Apothecaries' Assistants' examination are given on p. 523. The age is to be 18 and the fee 5*l.* 5*s.*

SOUTH OF FRANCE PHARMACISTS had rather a good time at the recent meeting at Corsica. One who was there describes it on p. 527.

MR. J. A. GARDINER, Director of Messrs. Boileau & Boyd, Dublin, died last week; also Mr. A. McIntosh, of Edinburgh (p. 530).

THE NEW BADGE for the President of the Pharmaceutical Society of Great Britain is sketched by Mr. Reynolds this week (p. 538).

ENGLISH POTTERS are opposing strongly the new regulation in regard to the hydrochloric-acid solubility of "fritt" glazes (p. 543).

WE print on p. 546 some interesting information regarding the advertising and profits of manufacturers of American proprietary medicines.

FURTHER GLEANINGS from the British Association deal chiefly with the most interesting papers in the chemical and botanical sections (p. 544).

THE CHEMICAL DEPARTMENT of the Indian Museum at Calcutta, of which Mr. David Hooper is director, is doing excellent work, as shown by the notes on p. 543.

THE GROCERS' EXHIBITION, held in the Agricultural Hall this week, is a success, and many exhibitors report that chemists are amongst the principal callers (p. 531).

CHEMISTS are sometimes called upon to administer medicines to cats and dogs. An excellently-illustrated article on how it is done is given in this issue, beginning on p. 534.

IN THE CORNER FOR STUDENTS we print a reduced facsimile of the new certificate given in the tournament, and, regarding the latter, intimate its postponement for a month (p. 522).

FURTHER CORRESPONDENCE on the apprentice difficulty is printed on p. 549, and we comment in an article on p. 540 upon the scarcity of qualified assistants as well as apprentices.

THE CAMPHOR MONOPOLY is threatened with severe competition from Japanese camphor manufacturers. The last available particulars in regard to the Formosan produce are given on p. 541.

WE EPITOMISE the annual report of the Board of Inland Revenue, which shows a record total of revenue generally, and that the sales and sellers of patent medicines are increasing (p. 542).

THE BRITISH PHARMACEUTICAL CONFERENCE has elected a number of honorary members, and the Formulary Committee appeals to chemists for hints as to what should go in the formulary (p. 536).

THE vessel of holy oil (*la Sainte Ampoule*) with which French kings were wont to be anointed has attracted the attention of the Czar and Czarina when they were at Rheims. Our Paris correspondent relates the history of the *Ampoule* (p. 527).

NO IMPORTANT ALTERATION has transpired on the markets this week. Menthol, senega, shellac, balsam (Canada), Persian galls, and peppermint oil are all higher, while articles with a lower tendency include cream of tartar, citric acid, sulphate of copper, and vanilla. The drug-sales are reported on p. 555.

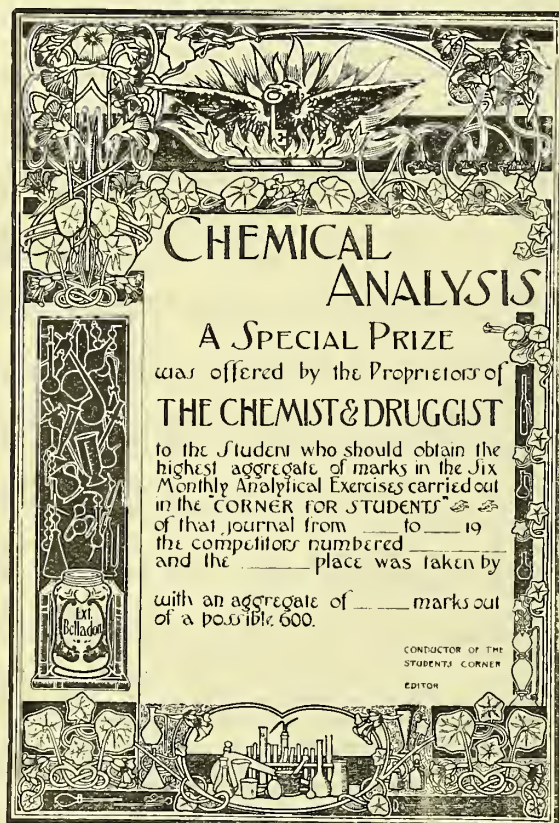
Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

THE ANALYTICAL TOURNAMENT.

It has been suggested to us that, owing to the schools having but recently been opened and students being, therefore, scarcely in the full swing of analytical work, it would be an advantage if the tournament for the Winter Session were to begin with the next analysis, rather than with the mixture of salts sent out on Wednesday of this week. We have consulted Dr. Dobbin in the matter, and he agrees that it will, on the whole, be a better arrangement. Those who have received the salt sent out on Tuesday of this week will, however, understand that we shall award to the two who send in the best reports book prizes as already intimated, and we hope that this preliminary competition will add greater zest to the tournament.

The engraving set in this paragraph is a miniature facsimile of the certificate which will be awarded to the



tournament prize-winners. It is a new design by our staff artist, and the original measures 18 inches by 12 inches, and is printed on vellum.

REPORT ON THE ESSAY AND QUESTION COMPETITION.

There was a very small response to the announcement of this competition, only seven students sending in papers. The features of the competition are that the students who have attained the three highest places in the list form a group by themselves with almost equal marks, and that, whilst these three have obtained a creditable percentage of marks, none of our correspondents has reached as high a standard as we had hoped for in our prize-winners. Generally stated, the essays and answers that have obtained low marks owe that result more to their incompleteness than to any inaccuracies contained in them; and we desire to point

out that in this instance (as is very commonly the case in examinations where access to books of reference is not possible) the competitors have not directed their attention sufficiently carefully to answering in a systematic manner every point expressly involved in the questions, but have written their answers for the most part in a rather general and discursive way. Answers should not only be as precise and as concise, but also as complete as possible. Whilst nothing should be absent from an answer which is involved in the question, on the other hand an answer should not contain anything which the question does not really involve. The answering of examination-questions may, with practice, be made of the nature of a fine art. We have briefly alluded here to a few of the first principles only.

The essays on "Fehling's Solution" were, upon the whole, carefully compiled, but one or two competitors (in spite of our special note to the contrary) confined their remarks almost exclusively to the description of manipulation, and only made very slight reference to the chemical facts underlying the preparation and use of this important solution.

PRIZES.

The First Prize for the highest aggregate marks has been awarded to

H. ROBERTS, 285 High Road, Leyton, N.E.

The Second Prize has been awarded to

C. R. WILKINS, 40 Church Lane, Hornsey, N.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

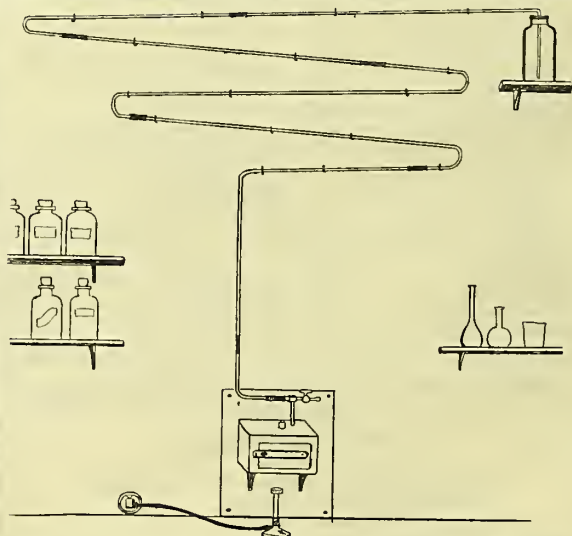
MARKS AWARDED FOR PAPERS.

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A. R. Thornewell ...	74	A. Harrison ...	52
Omega ...	66		

Reflux=condenser for Water=oven.

By SYDNEY C. GADD.

THE condenser consists of a brass T piece, one arm of which is connected with the water-supply by rubber tubing, the flow being regulated by a tap, and the other arm for outlet of steam. To the latter is joined 20 feet of glass



tubing ($\frac{1}{8}$ -inch bore) by indiarubber connections. The steam condensed in the glass tubes falls back into the oven. The waste steam is caught in a bottle (placed on a high shelf), and returns automatically to the oven when the source of heat is removed.

English News.

Local Newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

William Bolton, chemist's assistant, was fined 5s., including costs, at Shrewsbury, on September 19, for furiously riding a bicycle.

Three hounds belonging to the Essex Union Pack have been poisoned by strychnine, and 25*l.* reward is offered for the conviction of the layers of the poison.

A clergyman named Keet was remanded at Waterloo (Liverpool) Police Court, on September 21, on charges of stealing property to the value of 4*l.* 4s., belonging to Mr. S. J. D. Manson and Mr. E. A. Rider, chemists, Waterloo.

At a meeting of the Tiverton Board of Guardians last week it was agreed that the balance of Dr. Duncan's account for the supply of cod-liver oil and malt-extract (see *C. & D.*, September 7, page 400) be paid, and that in future pure cod-liver oil only be supplied.

The late Mr. Richard Reynolds' house, Cliff Lodge, Hyde Park, Leeds, was sold by public auction on Wednesday, September 25, and realised 2,750*l.* Many of our readers have had the privilege of visiting the gardens and green-houses of this ideal English home.

Edward Wakefield (37), an assayer, was committed for trial at Clerkenwell on September 20, on charges of stealing, during the past three months, from 78 Hatton Garden, Holborn, 28½ oz. of gold and silver, value 9*l.* 15s. 2*d.*, the property of Messrs. Johnson & Matthey (Limited), assayers.

Two errand-boys in the employ of Mr. G. Isaac, chemist, Bristol, appeared at the Bristol Police Court on September 18, charged with stealing six bottles of scent, value 6s. 6*d.*, from their employer. One of the prisoners was sent to a reformatory for three years, and the other was discharged.

On September 22 the new premises at Durham Grove, Morning Lane, Hackey, N.E., to which Messrs. Marion, James & Ker, manufacturing chemists, have recently removed, were "burgled" for the third time in eight days. Doors were forced, all letters opened and postal orders abstracted, and on the last occasion the visitors made a fire of letters, envelopes, and labels, boiled a kettle and made tea.

Four boys were remanded at Bow Street, on September 21, on a charge of burglary at the dispensary of Mr. James Bremner, medical practitioner, 26 Drury Lane. It was stated that the prisoners (one of whom had been in the doctor's employ for about ten months, but was under notice to leave) had obtained access to the house by lifting the area grating, and that they stole 10s. from a till in the dispensary, and between 20s. and 30s. from a drawer, where it had been placed by Mr. H. M. Withington, the dispenser.

Chemists' Licences.

Mr. Wm. Rogers, chemist and druggist, Church Street, Bilston, has been granted an off wine-licence.

Off spirit-licences have been obtained by Mr. A. Whalley, 38 Oldham Street, Manchester, and by Mr. H. Wovender, chemist, Altrincham.

Off wine-licences have been granted to Mr. Charles Bagshaw, chemist, 187 Ashton Old Road, Openshaw, and to Mr. H. S. Hall, chemist, 119 Medlock Street, Hulme.

Apothecaries' Assistants' Examination.

The Society of Apothecaries of London intimates that on and after January 1, 1902, the following new regulations for the Assistants' Certificate will come into effect:—

1. Candidates must be 18 years of age.
2. A certificate of six months' practical pharmacy will be required, such certificate to be signed by a registered medical practitioner, or an assistant of the Society holding a public appointment, or by a pharmaceutical chemist.
3. The fee will be 5*l.* 5s. Re-examination fee, 2*l.* 2s.

The examination will remain as described in our Educational Number, September 7.

Sheffield Pharmaceutical and Chemical Society.

At the Council-meeting held on September 23 the following officers were elected for the coming year:—President, Mr. J. Austen; Vice-Presidents, Messrs. A. R. Fox and C. F. Carr; Treasurer, Mr. Geo. Squire; Hon. Secretary, Mr. H. Antcliffe; Auditors, Messrs. H. E. Ibbitt and J. G. Jackson; Librarian, Mr. F. W. Whitworth.

Owens College Evening-classes.

A course of twenty lectures on elementary botany will be given by Dr. Otto V. Darbishire, Senior Demonstrator and Assistant Lecturer in Botany, on Fridays from 7 to 8 P.M., commencing on Friday, October 11. Each lecture will be followed by practical work in the laboratory from 8 to 9.30, when some of the points dealt with in the lecture will be examined practically. Fee for the lecture course alone 10s. 6*d.*, for the lecture and laboratory courses 2*l.* 2s. The latter includes the use of all necessary reagents and material, and the loan of a microscope. The courses are likely to be good for pharmacy students.

Cricket.

Wholesalers' Cricket Challenge-cup Contest.—The tie between the Wellcome C.C. and the Davy Hills C.C. was played off at Raynes Park on Saturday, September 21, the weather and ground being wet once more. The Wellcome C.C. won the match, having hit up 66, including 10 extras, while the Davy Hills made 53, which included only 1 extra, so that the contest was exceedingly close. For the winners Gordon Cowen (11), Purton (20), and Friend (10) were the best scores, while for the Davy Hills Cluh Collins with 10 and Maughan with 30 hit very well. This is the third consecutive year in which the Wellcome C.C. have obtained the silver challenge cup.

Contracts.

Mr. T. E. Barrass, pharmaceutical chemist, Chard, has been appointed chemist and druggist to the workhouse.

Mr. George K. Rayson, chemist, Commercial Road, Lowestoft, has been appointed chemist to the local Board of Guardians.

Romford Board of Guardians have appointed Mr. J. W. Latham, pharmaceutical chemist, of Romford, chemist to the workhouse.

Lichfield Board of Guardians have appointed Messrs. John Richardson & Co., Leicester (Limited), to supply drugs to the workhouse for the next year.

Upton-on-Severn Board of Guardians have appointed Mr. H. J. Aubrey, chemist and druggist, Worcester, to supply drugs to the workhouse for the coming half-year.

Strood (Kent) Board of Guardians have accepted the tender of Jeyes' Sanitary Compounds Company (Limited) for carbolic acid at 16s. 6*d.* per cwt., and disinfecting-fluid at 10s. 6*d.* per 12 pints.

Messrs. Thos. G. Stonham & Son, chemists, Maidstone, have been appointed by Cranbrook Board of Guardians to supply medical appliances to the workhouse. The same firm will supply drugs to Hollingbourne workhouse.

On September 23, at a meeting of the St. Marylebone Board of Guardians, the committee recommended that the tender of Messrs. Corbyn, Stacey & Co. (Limited), of 300 High Holborn, to supply the Infirmary and the North and South Dispensaries with drugs for 314*l.* 4s. 8½*d.* be accepted. The other tender, for 325*l.* 15s. 1*d.*, was by Messrs. T. Hodgkinson, Prestons & King. The recommendation was adopted. The same committee recommended the acceptance of the tender of Messrs. Burgoyne, Burbidges & Co., 12 and 16 Coleman Street, E.C., to supply the Infirmary and North and South Dispensaries with druggists' sundries for 207*l.* 10s. 3*d.*, which was adopted. Other tenders were Messrs. Leslies (Limited) (218*l.* 6s. 9*d.*), and Messrs. S. Maw, Son & Sons (227*l.* 7s. 2*d.*).

The Canterbury (Kent) Board of Guardians on September 17 received the following tenders for the supply of two water-beds and 20 yards of waterproof sheeting for the infirmary:—P. W. Cowell & Co, Cheapside, E.C.: beds (43 inches by 36) 6*l.* 10s., sheeting 2s. 4*d.* per yard; Walker

& Harris, chemists, Canterbury: beds 6*l.* 12*s.* 6*d.* each, sheeting 2*s.* 2*d.* per yard; Lander & Smith, chemists, Canterbury: beds 4*l.* 11*s.* 10*d.* each, ditto 72-inch by 36-inch 5*l.* 13*s.*, sheeting, "A" quality 2*s.* 6*d.* per yard, "B" quality 3*s.* 2*d.* per yard; Bing & Sons, chemists, Canterbury: beds 3*l.* 5*s.* each, sheeting, "A" quality 2*s.* 3*d.* per yard, "B" quality 2*s.* 6*d.* per yard, "C" quality 2*s.* 9*d.* per yard. After inspecting the samples the Board decided to accept the tenders of Cowell & Co.

Good Samaritans.

An explosion of gas occurred at the Victoria Hall, Rhyl, on September 16, and the victims, Miss Thwaites, a cookery lecturer, and Mr. Jarratt, an attendant, were conveyed by Mr. P. J. Ashfield, chemist and druggist, to his pharmacy, opposite the hall, where Mr. Ashfield, his wife, and his assistants did all that could be done for the unconscious sufferers pending the arrival of the medical men. The lady was subsequently removed to the hospital, and the attendant to his lodgings.

At an inquest held at Walworth on September 21, on the body of a pianoforte-maker named Chambers, evidence was given by Mr. A. P. Barnard, chemist and druggist, of Hackney Road, who stated that deceased, who appeared very ill, entered his shop on August 18. Mr. Barnard tried to administer a draught, but the man could not swallow, so witness sent at once for Dr. O'Regan. After being attended to for an hour in Mr. Barnard's pharmacy, deceased was removed to the infirmary. There was some delay in admitting the man to the infirmary, Mr. Barnard (who is a guardian) was sorry to say, and by the time he was got into Bethnal Green infirmary the man was dead. According to the medical evidence he died from syncope arising from bronchitis and enlarged heart, and the neglect to admit deceased earlier might have accelerated the death.

British Homœopathic Society.

The annual congress of this body was held at Liverpool on September 29. Dr. John D. Hayward (Liverpool), Vice-President, presiding in the absence, through illness, of the President, Dr. George Clifton, of Leicester, whose presidential address dealt with "The New Century; the Increasing Purposes of the Medical Age." He emphasised the fact of the debt which the world at large is under to the early pioneers of homœopathy, and pointed out that many changes have taken place in the position of homœopaths through the good work done by the Society. He knew that some of their best men had hankered after recognition as members of the established medical church, but they could not admit the desirability of a united profession till they had it acknowledged that homœopathy is the science of therapeutics. Several papers were communicated, and Mr. C. Knox Shaw, L.R.C.P., M.R.C.S., Wimpole Street, W., was elected President for the ensuing year, and Mr. T. W. Burwood, L.R.C.P.I.&E., Ealing, Vice-President. Dr. Madden (Bromley), and Dr. Dyce Brown (London), were respectively reappointed Hon. Treasurer and Hon. Secretary. It was decided to hold the next congress in London.

Left the Handle.

On September 19 burglars entered the establishment of Boots (Limited), in Market Street, Longton, and, removing the safe from its place under the counter, carried it off bodily, the handle only being left. Access had been obtained by a skylight, and two or three men must have been at the job. None of the stock was disturbed, but the desk and cash-till had both been examined, as well as the pockets of an old overcoat belonging to Mr. S. T. Russon, chemist and druggist, the manager. The safe, which contained 13*l.* in cash, was removed by means of a hand-cart belonging to a neighbouring ironmonger. The police are clueless.

Birmingham Notes.

The death is announced of Mr. Charles Pumphrey, who did much locally to popularise rubber goods at the works in Ryland Street, now owned by the Midland Rubber Company. He was an active scientist and a member of the Birmingham Microscopical and Natural History Societies.

"Do you sell Crowfig?" was the question to a brother chip this week. "Yes," was the answer; "but as I do not

know you it is unlawful to sell it to you. Bring a witness known to both of us and you shall be supplied." All this because pulvis nucis vomicæ was wanted.

At Walsall on September 20, Josiah Anstin, chemist and druggist, Nechells Green, Birmingham, and Joseph Ivines were summoned for cruelty to a horse, the former for causing it to be worked while lame, and the latter for working it. Austin was fined 40*s.* and costs, and Ivines 10*s.* and costs.

Mr. J. Freeman, chemist and druggist, has added to his many duties the office of gas-account collector for his district of Dudley Road. It is found a great convenience to consumers to hand in their cash at a local establishment instead of trudging to the Council's Gas Departmental Office at Victoria Square.

Much sympathy will be felt with Mr. H. J. Masters (who represents Messrs. John Richardson & Co., Leicester, Limited) on the death of his son, a very promising young fellow, who recently passed the Minor, and hoped to be an ornament to the profession which his father has served so well for many years in Birmingham and the Midlands.

The arrangements made by the powers that be for the attendance of provincial students at the London and Edinburgh examinations are not greatly appreciated by candidates. It is pointed out that the present method necessitates many travelling on a Sunday—which is repugnant to some—in order to be in time for the examination on Monday morning. Seeing that there are many on the spot at both centres it could surely be arranged to take them first and provincials on the Tuesday and subsequent days. It is peculiarly unfortunate for lady candidates.

The Manchester Brewers' Exhibition.

At the Brewers' Exhibition, now being held in St. James Hall, Manchester, Messrs. Jewsbury & Brown, mineral-water manufacturers, have a very attractive display of their table-waters, syrups, and acidulated beverages. The Kops Brewery, Newton Heath, exhibit cordials, bitters, fruit-wines, ice-cream custard-powders, and ice-cream freezers, beside their non-alcoholic ales and stout. The Rosbach Springs (Limited), 13 Regent Street, London, exhibit their table-water, and Peri & Co., Colwyn Bay, have a stand of their medicinal water.

Laudanum for Cordial.

At an inquest held at Nottingham, on September 14, on the body of a five-weeks'-old child, named Brown, who died from laudanum-poisoning, the evidence showed that the child's sister, aged 14, was sent by her mother to the shop of Mr. Arthur Norweb, chemist and druggist, Fishergate, Nottingham, for a half-pennyworth of cordial for the baby. The child forgot what she was sent for, and asked for laudanum, which was supplied in the bottle she took. The baby was given four drops and died. The mother stated that a neighbour gave her the bottle, and she told her daughter to ask for Godfrey's cordial. Mr. Norweb deposed that the girl asked for a half-pennyworth of laudanum. The laudanum-label on the bottle was untorn, and as it was one of his own, it must have previously contained laudanum. Had he noticed, however, that a "Cordial" label was also on the bottle, he would have defaced it.

The Diarrhœa-mixture.

At an inquest held at Marden (Kent) on September 16, concerning the death of a London hop-picker named Rachael Hoskins, it transpired that in the place where she lived a medicine-bottle was found, which had been obtained from a London chemist. The bottle, according to Dr. Alfred Smart, contained about $\frac{1}{2}$ dr. of fluid, which he believed to be dilute sulphuric acid. Deceased, who was in an advanced stage of consumption, died from disease of the lungs and kidneys, and syncope caused by diarrhœa. Dr. Smart stated that, although there was no harm in the medicine, a medical man would not prescribe it alone. David Jones, who described himself as a pharmaceutical chemist, of 127 $\frac{1}{2}$ Waterloo Road, London, said the deceased sent to his shop for a dose of diarrhœa-mixture. He gave a mixture containing 1 $\frac{1}{2}$ dr. of tincture of iron and 1 scruple of pow-

dered ginger, mixed with 8 oz. of water, in the bottle produced. The next day he saw deceased, and advised her to go to the parish doctor. The jury returned a verdict of death from natural causes, and the Coroner (Mr. C. D. Murton) warned Mr. Jones of the danger of the practice of dispensing medicines indiscriminately.

Smallpox in London.

The Local Government Board has issued circulars to the metropolitan borough councils and boards of guardians calling attention to the present outbreak of smallpox in London, and urging that the most energetic measures should be taken to deal with the cases that occur with a view of preventing the spread of infection. The circulars are accompanied by a memorandum on the steps specially requisite to be taken in places where smallpox is prevalent. At midnight on Tuesday, September 24, there were 160 smallpox patients under treatment in the hospital-ships and shelter, and down to 7 P.M. on Wednesday five fresh cases had been admitted.

Garden-party.

A very interesting gathering took place on Saturday, September 14, at The Charter House, Coventry, when the whole of the office and warehouse staff of Wyleys (Limited) were present at a garden-party on the invitation of Mr. and Mrs. W. J. Wyley. Tea was served on the lawn in the afternoon, after which tennis, cricket, croquet, bowls, &c, were indulged in until dusk. The party then assembled in a spacious marquee, and sat down to an excellent dinner, after which a most enjoyable evening was spent. Before separating, a hearty expression of thanks was tendered to Mr. and Mrs. Wyley, in reply to which Mr. Wyley expressed the great pleasure it afforded both Mrs. Wyley and himself to meet his guests at The Charter House.

Fires.

A fire broke out on September 18 in the warehouse of Messrs. H. J. Gratte & Sons, chemists and oilmen, Bolt Street, Newport, Mon., but was quickly got under by the prompt arrival of the fire brigade. Mr. Gratte cannot account for the outbreak. The damage done was considerable.

A fire broke out at Messrs. Chapman & Co.'s wood-wool factory, Neptune Wharf, Deptford, on September 20, which also involved the Neptune Chemical-works, belonging to Mr. A. J. Dickinson, and an extensive shed used as an oil and naphtha stores. The wood-wool premises were entirely destroyed, and those of Mr. Dickinson were badly damaged.

On September 25 a fire occurred in the laboratory of Messrs. Dibdin & Tbudichum, analytical chemists, at 2 Edinburgh Mansions, Victoria Street, Westminster. The fire-brigade was quickly on hand, and the flames were overcome in about a quarter of an hour, but not before the laboratory had been badly damaged. The overheating of a furnace is presumed to be the cause.

On September 17 a fire broke out at Peterborough—the third at a chemist's shop within the month. The latest outbreak was in Narrow Street, at the establishment of Mr. T. J. Calcutt, chemist and druggist. The assistant was engaged in heating a quantity of solution for photographic purposes on a spirit-stove, when the solution caught fire, and the floor quickly ignited. A hose-reel arrived promptly from the Corporation station, and in ten minutes all danger of the flames spreading was at an end.

Poisonings of the Week.

Twelve fatal cases of poisoning have occurred since our last report. In each case a scheduled poison was employed—laudanum (4), carbolic acid (3), morphia (2), oxalic acid (2), and cyanide of potassium. The morphia was taken in both cases by retired doctors. Oze (Dr. Carmichael, of Southport) took an overdose for insomnia, and the other (Dr. Leonard Smith, of Tisbury) gave himself an excessive hypodermic injection. A hotel-porter named Lloyd, by telling a Harrogate chemist that a horse which he had bought was injured in the chest and that he wanted a large quantity of an opiate to give the horse, in order that it might be operated on by a veterinary surgeon, obtained ninepennyworth of laudanum. This he drank, and died. A

confirmed opium-drinker at Todmorden died on September 19 from "chronic opium-poisoning." No fewer than thirteen attempted suicides by poison are recorded. In four of these cases carbolic acid was used unsuccessfully, hydrochloric acid was tried by three persons, laudanum was used twice, the other agents tried being salts of lemon, sulphate of zinc, perchloride of mercury, and phosphorus-paste. A case of accidental poisoning occurred at Tipton, a lotion being mistaken for a mixture for internal use. In connection with a recent attempted poisoning at Eastbourne, a correspondent to the *Eastbourne Gazette* writes:—

I beg to point out the public danger incurred by the sale of poisons by an unqualified man. In the case of a girl recently, she alleged she obtained the drug (in this case oxalic acid) from Mr. Carter's, chemist, near Ceylon Place, Seaside, and in your report Mr. Ransom is stated to have said, "Mr. Carter knew nothing of it." Probably the latter is absolutely correct, as Mr. Carter has been dead several years. An application to the Pharmaceutical Society informs one that there is no chemist of the name of Carter in business in that locality. The object of this letter is to call public attention to a flagrant abuse of that useful measure, the Pharmacy Act.

This case appears to be worthy of the attention of the Pharmaceutical Society.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Pharmaceutical Society of Ireland.

At the last Council meeting of the Society Mr. J. W. Harvey, of Cork, was elected a member, but his name was accidentally omitted from the report in our issue of September 14.

Council Vacancies.

The following nominations have been made for the three vacancies occurring on the Council of the Pharmaceutical Society of Ireland through Messrs. Wells, Montgomery, and Brittain not seeking re-election:—

Richard Blair, M.P.S.I., Patrick Street, Cork. Proposed by the President and seconded by the Vice-President.

Mr. H. V. Golden, of Birr, King's Co. Proposed by Vice-President, seconded by the President.

Mr. John Smith, M.P.S.I., Terenure, Dublin. Proposed by the President, seconded by the Vice-President.

Mr. T. J. English, M.P.S.I., Rathgar. Proposed by Mr. Wells, seconded by Mr. O'Sullivan.

Messrs. Blair and Golden as representing the provinces (at present unrepresented) would largely help in widening the interests of the Society, and Mr. Smith, who has lately completed the usual term of five years as an examiner of the Society, is thoroughly versed in Society work, being an active member for many years. Mr. English is also a well-known pharmacist, and assisted very much in the arrangements for the Dublin visit of the British Pharmaceutical Conference. The members of the Council who retire by rotation and seek re-election are Messrs. G. H. Grindley (Dublin), P. Kelly (Dublin), G. Brown (Dublin), and James Tate (Belfast).

The Doctor's Explanation.

With reference to the report of the Visiting Committee of the Omagh Guardians, drawing attention to the fact that Dr. Hunter's bill for medicines was larger than any of the other doctors (see *C & D*, September 21, page 491), Dr. Hunter has replied that he had not ordered any medicines from July, 1900, until recently, and the medicines ordered by him were necessary. He always endeavoured to be as economical as possible. The Board decided to ask Dr. Hunter to confine his orders for medicines to quantity needs in future.

Defective Drugs.

The L.G.B. has drawn the attention of the Abbeylax (Queen's Co.) Guardians to the fact that Sir Charles Cameron has reported certain medicines supplied to the Abbeylax

Dispensary as not being up to the standard, and the Board states that the balance of these medicines on hand should be returned to the contractor. The wishes of the L.G.B. are to be complied with.

At the last meeting of the Antrim Guardians Mr. Blake, analyst, reported that of three samples of drugs from Donagh Dispensary, two were of good quality, but the third—Donovan's solution—was deficient in arsenious iodide 0.25 grammes in 100 c.c. The clerk was instructed to write to the contractor on the subject.

Fire.

On September 19 a slight fire occurred at Messrs. W. & A. Ross's mineral-water manufactory in Belfast. The outbreak was quickly dealt with, little damage being done.

Natural Orders.

The recent discussion on the poor attendance of members of the Council of the Pharmaceutical Society of Ireland at their monthly meetings has elicited the following local classification:—(1) The regular attendants; (2) the total abstainers from attendance; and (3) the militia, who are only called up on certain occasions.

Quite Fresh.

The recent very pleasant visit of the Conference to Dublin was productive of a solitary "Irish bull." One of the speakers (Irish), while holding out a future invitation, "Possibly we may not be here to entertain, but there will be others coming after us who will worthily follow in the footsteps of their successors."

Trusses from Local Chemists.

This question was again raised at the last meeting of the Waterford Board of Guardians, when a letter was read from the L.G.B. stating that they would raise no objection to the medical officer of No. 2 Dispensary District ordering trusses direct from the contractor provided he advised the Guardians of the fact. Mr. Kirwan: Had not we a similar reply to that from the L.G.B. before? (see *C. & D.*, September 21, page 491). The Clerk: Yes; the L.G.B. decided that they would raise no objection on condition that the contractor would have no objection, and that the local men would supply them as cheaply as the contractor. The Guardians directed that Dr. White be informed of the reply of the L.G.B. It will be seen that the latter body have not given way in the slightest; the articles are not to be ordered locally, but from the usual contractor. The doctor, however, may order the trusses direct when required, without waiting for an order of the Guardians. That is the only concession made.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

To Wind Up.

A petition for the sequestration of the estate of the late Robert Lyle MacKirdy, physician and surgeon, The Brae, Lossiemouth, and trading as a chemist and druggist at 35 Victoria Street, Rothesay, was presented on September 10. The agents are Messrs. Dalgleish & Dobbie, solicitors, Edinburgh.

At the Ironworks.

On September 23 the students of the West of Scotland College of Pharmacy, accompanied by the Principal (Mr. T. S. Barrie), visited the ironworks of Messrs. William Baird & Co. (Limited), Gartsherrie, Coathridge, over which they were conducted by Mr. Martin, the chemist to the works. The process of the manufacture of iron was witnessed, the most interesting part being the plant for the treatment of the furnace gases. These are first drawn through a large brickwork cylinder, and then directed through other cylinders, and through the first is forced the furnace air, which is thereby heated to 1,100° F. before entering the furnace.

After leaving the brickwork the furnace gases are passed through vertical pipes freely exposed to the air whereby they are cooled to about 100° F., and most of the tarry matter derived from the coal deposited. The partially purified gas is then washed with water to remove ammonia, and the residue gases consisting of CO + H are burnt to raise steam. The tarry liquid is distilled separately, for creosote oil and pitch, and ammonia is removed by a current of steam, and condensed in sulphuric acid forming ammonium sulphate.

French News.

(From our Paris Correspondent.)

A BRITISH-BORN PROFESSOR.—It is not often that one meets a French University professor horn on British soil. We may, therefore, just note that M. Fernand Jadin, the new professor of pharmacy at the Montpellier Superior School of Pharmacy, is a native of Mauritius, where he was born in 1864. The portrait of this brilliant young professor appeared in the *C. & D.* of August 11 last year, in our report of the International Congress of Pharmacy at Paris.

MYTHOLOGY OF THE HEALING ART.—M. Clermont Ganneau has presented to the Académie des Inscriptions and Belles Lettres a golden plate which M. Edmond Durighele had found near Sidon, on the site of an ancient Phœnician temple. M. Clermont Ganneau says the three figures on the plate are Esculapius, Hygiea, and Telesphore, respectively the gods of healing, health, and convalescence. The first two figures are familiar, but Telesphore is not quite so. He is a youth wrapped in a hooded mantle, and the academicians had a learned discussion in regard to him.

EXPLOSION.—On Tuesday morning, September 24, at Pressac's drug and chemical shop, No. 40 rue des Francs-Bourgeois, there was an explosion, followed by a fire. A. Decourt, employed by M. Chehreanu (successor of M. Pressac, and present proprietor of the shop) was going into the cellar with a lamp when the explosion occurred. He was horribly burnt, and died a few hours afterwards at the hospital. Another man, Charétiér, who was cleaning the shop-front windows when the accident happened, was badly cut by the glass broken by the explosion. The shop was badly damaged.

MUNICIPAL DISPENSARIES OF PARIS.—The Municipal Council of Paris has the reputation of being generous to a fault where services for the assistance of the poor are concerned, and use and abuse of the municipal dispensaries by the really well-off has often been alleged. This has been admirably proved to be the case by M. Téry, of the *Journal*, who has told in that lively print what he saw at one of the dispensaries which he visited. The medical man in attendance seemed to do nothing but sign orders for physic of the most pleasant character, and the enterprising reporter had no difficulty in getting the doctor to prescribe a cough-syrup and gentian wine for him.

DECORATIONS.—The Violet Ribbon of the Officer of Public Instruction has recently been conferred on several professors at the schools of pharmacy—viz. M. Béhal, Toxicology Professor at the Paris Superior School; M. Klobb, of the Nancy Superior School; M. Louis Planchon, of the Montpellier Superior School of Pharmacy; M. Sigalas, of the Bordeaux Mixed Faculty of Medicine and Pharmacy; and Professor Verne, of Grenoble. Two "Officers of the Academy" have been appointed—viz. M. Fortuné, of Béziers, one of the leaders of the Southern "anti-specialistes" and President of the Hérault Pharmaceutical Society, and M. Mouren, one of the half-dozen new assistant professors at the Paris Superior School of Pharmacy.

PHARMACY AND ARTILLERY are not usually closely connected, though ancient and spiteful writers have sometimes attempted to compare the deadly effects of cannon-ball and bolus. The following anecdote of M. Bateau, the recently deceased editor of the *Bulletin* of the Syndicate of Pharmacists of the North of France, and an old and most respected practitioner of the busy town of Lille, is worth repeating. As lieutenant in the "Canonnières Sedentaires" of Lille—an ancient territorial corps, never abolished, and the name

does not imply that they execute their artillery practice in a sitting posture—M. Bateau took part in a firing-contest at Vincennes, and won a prize. He was agreeably surprised to find that one of his fellow artillery prize-winners, M. Gouillon, likewise wielded the pestle when free from military duty; while one of the judges of the firing was M. Le Beuf, of Bayonne, a name familiar to all French and many foreign pharmacists as the enterprising manufacturer of several well-known proprietary medicines, and who is an officer in the 23rd Artillery (Reserve).

A TERRIBLE ACCIDENT.—M. Patrice, a pharmacist, of Perpignan, had only been married about six months to a young lady of some twenty summers whose parents lived near Cette. Madame Patrice went, about a month ago, to pay a visit to her parents, M. and Madame Bezenech. She had been there over a fortnight when she started with her mother and father to drive over to a friend's house. When they arrived at the level-crossing at Lapeyrade a locomotive was shunting, and it collided with the vehicle and horses, projecting them a distance of ten yards. Madame Bezenech and the coachman escaped practically unhurt, but M. Bezenech was picked up with his thigh and one of his ribs broken. As to the unfortunate young wife of the pharmacist, she was in a terrible condition, the legs and lower portion of the body being completely crushed, besides a broken arm and serious injuries to the head. She was still living, but died in about half an hour.

THE SAINTE AMPOULE.—The visit of the Czar to Rheims Cathedral, where the kings of France were crowned, has induced the *Temps* to publish some account of the Sainte Ampoule there preserved. It appears that the kings of France at the coronation ceremony were anointed not only on the head but on the stomach, between the shoulder-blades, on the two shoulders, and at the joints of the arms. The holy chrism was prepared on the golden plate of St. Remy's chalice, and a drop of balm was added, which was extracted by a golden needle from the Sainte Ampoule. When Clovis, the first Christian king of France was baptized, says the legend, the chrism was found to be wanting. St. Remy prayed, and a snow-white dove descended, bearing in its beak the "Sainte Ampoule" full of this holy balm. Marlot (grand prior of St. Nicaise, Rheims, in the sixteenth century) thus describes the holy relic: "The divine phial appears to be of glass or crystal. . . . Its size is that of an ordinary-sized fig. . . . The stopper is in red taffetas, and if you approach the nostrils it has the smell of the most exquisite balm. The liquor it contains is not absolutely liquid, but a little dry, like fine balm congealed." The phial was broken at the time of the great Revolution (October 8, 1793), but on the eve of its destruction MM. Seraine and Houelle had abstracted all they could of the miraculous balm, and wrapped it in a paper. The Ampoule was thus reconstituted, and used at the coronation of Charles X., the only coronation that has taken place at Rheims since. When Peter the Great visited Rheims in 1717 his first act was to go straight to the cathedral and ask to see this relic. The Czar and Czarina visited the cathedral on Thursday, September 19, and examined minutely and with evident interest the Sainte Ampoule.

Pharmaceutical Congress in Corsica.

A pharmacist present at these proceedings writes me as follows:—"Thirty delegates from the societies which form the Federation of the Pharmaceutical Societies of the South-East left Marseilles on September 6 on the steamer *Insulaire*, arriving at Ajaccio the next morning after a pleasant trip. Ten other delegates had left three days earlier. Among the two groups I noticed Professors Domergue and Gerhes (of Marseilles), Planchon, Jadin, and Belugon (of Montpellier), Fournier (barrister of the Federation), and most of the members of the Administrative Council, MM. Gamel (of Nîmes), Majide (of Montélimar, President Loubet's town), Alhiges, Collard, &c. The Corsican pharmacists, anxious to show their Continental guests the beauties of their island, had organised a three-days' excursion to some of the most picturesque places, so that we only started business three days later. On September 11 there were two meetings at Ajaccio. The first was for the Corsican pharmacists only, when an address was given on the work done by the Federation since its formation. The second was the General Assembly of the Scientific Society of Pharmacists of the South-East, which brings together the majority of the syndicated pharmacists of the region with the object of carrying on the struggle against proprietary medicines.

The growing prosperity of the Society was favourably commented on. On Thursday we travelled from Ajaccio to Bastia, about a hundred miles, with stoppages at Vizzavona, a magnificent forest 3,000 feet above sea level, and at Corte, the centre of the island, where a citadel exists to repel invaders. On Friday the Federation held its meeting at the Hôtel de Ville, of Bastia; all the Continental and some twenty of the Corsican delegates took part. Among these latter I noticed MM. Mourcei (President of the Syndicate), Teilliet (Secretary), and Gentil (Vice-President); the Mayor of Bastia—M. Gaudin—was also present. The most important discussion was on the 'stage' (apprenticeship). Professor Planchon had drawn up a report. The meeting voted that it is desirable that this 'stage' be reduced to two years, and that it follow the 'scolarité' (years of study), instead of preceding them as at present. The questions of proprietary medicines, pharmacy-inspection, workmen's pension-funds (the latest piece of French legislation being an attempt to provide pensions for aged workmen, and indirectly interests pharmacists), provident societies for providing pensions for aged pharmacists, &c., were also discussed. On these points the Federation reasserted its former views, which are opposed to the oppression of capitalists and in favour of the union ('solidarité') of the profession.

"The same evening we left by the steamer *Cettori*, and were received at Nice, the following morning, by the delegates of the pharmacists of the Alpes-Maritimes—M. Liotard (of Nice), Chairman, M. Tajasque (of Cannes), Vice-President, MM. Durin, Canivet, and others. At this time of year many of the Nice pharmacists are out of town. At midday on September 14 a banquet was given at the Hôtel de la Régence, and at 2 o'clock a meeting took place at the Town Hall. The questions here discussed were of local interest, but I may mention that the pharmacists of the department appreciate the services rendered by the Federation.

"Officially the Congress separated at Nice, but a band of congressists decided to visit Monte Carlo, not so much in the hope of 'breaking the bank' as with the more modest idea of gaining sufficient to pay their travelling expenses. The majority were unsuccessful in this effort, and returned wiser if sadder men from the board of green cloth. Next year the Conference will meet at Perpignan, where the President of the Syndicate is M. Terrer, Chevalier of the Legion of Honour."

East Indian News.

THE COCAINE-HABIT among natives has found its way to Bombay from Calcutta, and threatens to get out of hand as it has done in the capital.

MAJOR PRAIN, I.M.S., Director of Botanical Survey in India, has been granted six months' leave. Captain A. T. Gage, I.M.S., will take up the duties while he is away.

NITROUS OXIDE AND BOMBAY DENTISTS.—The European shipping companies have refused to carry nitrous oxide on board their vessels, with the result that when the present supplies (which are very small) are cleared out the gas must be made locally, or find no place in the dental practice of the city.

AN INDIAN GLUE COMPANY.—The prospectus has been issued of the Madras Glue-manufacturing Company (Limited), which is to have a capital of 50,000*rs.*, in shares of 25*rs.* each. It is to be a purely Indian concern, started by Indians, worked by Indians under Indian management and expert supervision, and for the benefit of the Indian consumer. The company, the promoters feel, is an attempt in the direction of solving the question of utilising, by indigenous agency and capital, the resources and the raw material of the country for the production of articles that are now manufactured by foreign countries and sent to India.

OPIUM-CULTIVATORS' STRIKE COLLAPSES.—The strike among the opium-cultivators of Ghazipur, to which reference has previously been made in the *C. & D.*, has collapsed, although the petition for an increase in the price of the opium and other products supplied to the Government was refused. The feeling which originated the petitions probably had its origin to some extent in dissatisfaction at the price paid for last year's opium. Cultivators are paid according to the quality of their opium, and the drug last season was lower in quality than in any previous year of which there is a record. The settlements of the year in the Benares agency may result in a small decrease, but this will probably not be more than 2 per cent., and but for the low consistence of last year's opium a considerably increased area under poppy cultivation might have been anticipated.

South African News.

(From our Colonial Correspondents.)

CAPE PATENTS.—Mr. Philip Wagner Rumer, of Cape Town, has applied for a patent covering a "machine for the production of acetylene gas."

A PHARMACY FOR NATIVES.—The Assistant Secretary, Native Affairs Department, Cape Town, invites tenders for a stand for a chemist's shop at the Uitvlugt native location, near Cape Town.

MILK-ANALYSES.—According to the report of the senior analyst of Cape Town (Mr. C. F. Juritz, M.A.) for the quarter ending June 30, 1901, four samples of condensed milk were examined and found to be genuine. Of milk, 129 samples were analysed, of which twenty-four were adulterated.

TRADE-MARKS.—Application for the registration of the following trade-marks has been made in Cape Colony:—The word "Tahor," by Maurice Eilenborg, of Cape Town, in respect of chemical substances, disinfectants, soap, &c., in Class 2; the word "Molassine," by the Molassine Company (Limited), 33 Mark Lane, London, E.C., in respect of food and condiments for animals, in Class 42.

DISINFECTANTS AT A DISCOUNT.—The market at Cape Town is now glutted with disinfectants of all kinds, and there seems no immediate prospect of their moving off rapidly owing to decrease in the plague and the scare which accompanied it. A large quantity is also lying at the docks ready for delivery. In the Cape Peninsula there has been no case of plague during seven days previous to the departure of the mail. The total number of deaths to the end of August was as follows:—

Males: 51 (European), 161 (coloured), 67 (natives).

Females: 17 (European), 83 (coloured), 8 (natives).

BUSINESS IN CAPE COLONY.—Trade at Cape Town and other Cape ports is still of a very restricted character, and the outlook is none too promising. The importing retail chemist continues to experience difficulty in landing supplies owing to the apparently hopeless muddle at the docks, which tends to forcing more local purchases. Should the military authorities succeed in getting the Colonial Government to acquiesce to martial law being put into operation in Cape Town (to which chemists would be only too willing to submit if it would tend towards bringing the war to an end) the displacement of civil government would be looked upon by them as nothing short of a calamity for business.

NOTES FROM MAFEKING.—It is exceedingly difficult to carry on business here (writes our correspondent), and it is quite a month since I obtained any goods by rail other than small passenger parcels. The Office of Comptroller of Civil Supplies at Kimberley is in a state of chaos, as my permits, duly approved of at Mafeking and forwarded to Kimberley, cannot be found, and it is impossible to obtain even goods by passenger train without them. I had three parcels of medicines the other day for different stations up the line, and for three days the railway refused to take them without the permit, which it would take six days to obtain from Kimberley. Fortunately our Commandant (Lt.-Col. Vyvyan) had more common sense than many military officials, and on the matter being laid before him, he at once gave peremptory orders to the station master to forward the goods.—In reference to the correspondence regarding the comparative values of salaries in South Africa (while agreeing with the remarks of "Aloes Capensis" in the *C. & D.* of August 3 so far as regards Cape Town), I would point out that there is a considerable difference between the cost of living at the coast and inland. Steady, qualified men, who do well at home, get on in South Africa, and while assistants are not infrequently engaged without references, they are as easily dismissed for incompetence or intemperance, and it costs pounds, not shillings, to get to another town and make a fresh start. There is very little news to write about from Mafeking, and were it not for THE CHEMIST AND DRUGGIST one would get hopelessly behind the times and out of touch with the world of pharmacy.—The Boer Refugee Camp at Mafeking is increasing at an alarming rate. At present there are 5,300 men, women, and children in it; 700 more are expected in a day or two. There are two resident doctors

in attendance, one an Austrian M.D., and the other a German. The dispensing is done by them, with the assistance of an unqualified German chemist, who was already in the camp.

Colonial and Foreign News.

INTERNATIONAL PHARMACEUTICAL CONGRESS.—Professor Tschirsch, of Berne, has suggested to the Swiss Pharmaceutical Association that they should invite the Congress to meet in Berne, but the Association have declined for lack of funds.

OPIUM IN JAVA.—In certain provinces of Western Java called the Preanger Regencies the consumption of opium, allowed elsewhere in the island, has been forbidden since 1824. The Government now seeks, it is said, to reintroduce opium-smoking there, though the people, from years of abstention, make no use of the drug. Need of more revenue is said to be at the bottom of the move.

RESTRICTED USE OF PLATINUM.—A curious Bill which imposes restrictions on the use of platinum has excited considerable interest among electricians and photographers in Germany. The proposed law provides that since platinum is essential to electrical work its use in photography, where it is not essential, should be forbidden, so as not to diminish what is at best the scanty supply available for the work that cannot be done without it.

PROPOSED GERMAN TECHNICAL BUREAU.—A federal bureau of technics is to be established in Germany. The executive committee having charge of the preliminary steps in the matter consists, it is said, of members of the leading chemical works, the Technical Association of Germany, the Association of German engineers, the Central Bureau for Scientific Observation and others. The scheme is also supported by several well-known electrical firms in Germany.

A LITHOPONE COMBINE.—A meeting of German lithopone manufacturers was held in Berlin on September 8, at which it was decided to form a convention. Of late there has been a considerable over-production in this article, through the older factories having been enlarged and new firms entering the trade, which fact has brought about a reduction in prices, and one of the new undertakings had to shut down. The *Farben Zeitung* reports that the first step of the convention will be to raise prices and endeavour to limit the production.

THE UNION OF GERMAN MINERAL WATER MANUFACTURERS will meet in Hamburg on October 7 and 9. The meeting is expected to be attended by numerous foreign mineral water manufacturers who have expressed the intention of creating an "International Association of Mineral Water Manufacturers" for the purpose of protecting common interests.

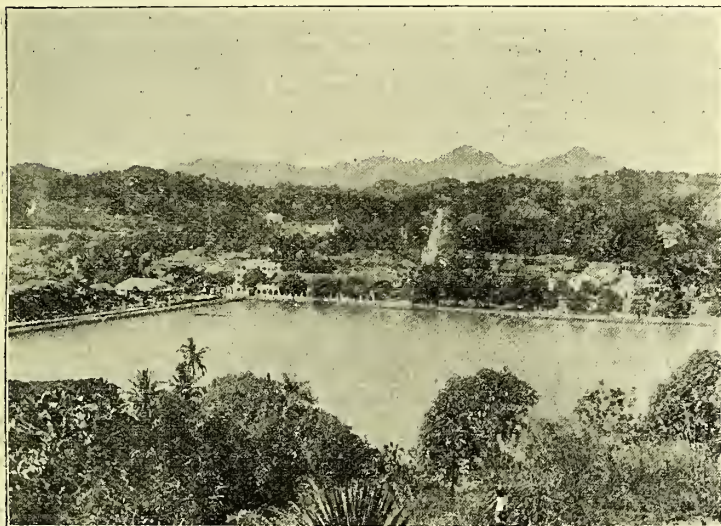
THE CHINESE TARIFF.—The negotiations for the conversion of the present *ad valorem* duties in China into specific duties, as arranged should take place as part of the increase to 5 per cent. in the import-tariff of China, will be effected at Shanghai. On behalf of Great Britain the negotiations provided for by Article XI. of the Protocol signed at Peking will be conducted on behalf of the British Government by a special Commissioner, Sir James MacKay, K.C.I.E., member of the Indian Council. Mr. H. Cockburn, C.B., Chinese Secretary to the British Legation at Peking, and Mr. C. J. Dodgen, of Messrs. Ilbert & Co. Shanghai, one of the leading members of the British mercantile community, have been appointed assistant Commissioners.

CONTINENTAL CALCIUM CARBIDE.—An interesting report has recently been issued of the work done during 1900 by one of the Chief Berlin Laboratories, which make a special feature of analysing calcium carbide and the various accessories required in acetylene generation, according to the specifications of the German Acetylen Verein. Of the samples of lump carbide tested 36 per cent. evolved about 285 litres of gas per kilo. (453 cubic feet per lb.); 52 per cent. evolved between 285 and 290 litres (453 to 462 feet); 8 per cent. evolved between 290 and 300 litres (462 to 476 feet), and only 4 per cent. gave more than 300 litres. The samples of granulated carbide gave on an average 210 litres (333 feet), the yield sometimes falling to 150 or 180 litres (24 to 29 feet); and much of this stuff was "guaranteed 300 litres."

A Chemist's Life in Ceylon.

FEELING, like many young chemists, a lack of freedom in the existing conditions of shop-life at home, I determined to "seek pastures new," and thus gratify my desire "to see the world." This, thanks to the *C. & D. Supplement*, I was able to do, by being successful in obtaining a situation in Ceylon. Accordingly I set sail, and duly landed at Colombo after a most enjoyable voyage. Kandy, the old capital of the country, situated near the middle of the island, was my destination. The railway between Colombo and Kandy—as, indeed, all the railways in Ceylon are—is owned by Government, and is a triumph of engineering skill in mastering the difficulties of passage through a very mountainous country.

There is a story—the truth of which I cannot verify or



KANDY, CEYLON.

hold myself responsible for—to the effect, that the hollow in which Kandy lies was the situation of the Garden of Eden. As far as scenery goes, it might well have been so, as can be judged—but imperfectly—from the photo here given.

As naturally expected, I found business very different from what I had been accustomed to. The shop I found to be a fairly large one, run on colonial store lines. A large and multifarious stock is kept, including chemicals, drapery, groceries, ironmongery, waxes, wines, spirits, &c. The store is opened at 7.30 A.M., from which time till 10 A.M. is the busiest part of the day, as it is the coolest. Business is suspended for the day at 5 P.M., which leaves 1½ hour for exercise, darkness invariably setting in about 6.30.

A considerable number of natives are employed, Burghers, Singhalese and Tamils. All dirty work, such as packing and bottle-washing, is done by coolies, who receive a wage of about 30 cents (*5d.*) a day. On this small sum they live, and seem to prosper, being able to get a good meal of curry and rice for a few cents. Burghers and Singhalese are employed as assistant dispensers, and they perform their work intelligently and well. They generally speak English, Singhalese, and Tamil fluently, and when necessary act as interpreters. It is rather startling at first to be surrounded by a crowd of almost naked natives, gesticulating, and no one near to explain the mystery. Here is an order received by us recently:—

The Singhalese writing is similar in appearance. Here is an order :—

മിതം കോശം	കുറുപ്പ് 2
മൃഗം	കുറുപ്പ് 4
ശവം	കുറുപ്പ് 1
വേഗം	കുറുപ്പ് 2

I am afraid it will be necessary to explain that the above stands for—

Chiretta	...	...	...	2 kalan
Ginger	...	...	...	4 kalan
Jalap	...	...	...	1 kalan
Asafetida	...	...	...	2 kalan

A kalan is the weight of one cent, about 70 gr. Worms are an exceedingly common disease in Ceylon, and "Panu Bathe" (santonin lozenges) are in constant demand.

The prescriptions by European doctors are very similar to those met with at home.

A cachet containing—

Bismuth. salicylate	...	10 gr.
Salol	...	5 gr.
Dover's powder	...	5 gr.

is found very beneficial in diarrhœa. The salts of quinine are largely used. A powder of—

Quinine hydrobromide	...	5 gr.
Phenacetin	...	5 gr.

is the favourite remedy for slight fever.

The experience obtained in the colonies is very valuable, both from a pharmaceutical and business point of view. The work is, however, confining. People in the tropics seem to grow over-anxious about having little compunction about ringing up their business-hours for very trivial things.

W. SMART.

Personalities.

MR. E. PLOMER, whose illness we referred to last week, is of Messrs. Peake, Allen & Co., Lucknow, and Messrs. Morrison & Co., Naini Tal, N.-W. Provinces.

COUNCILLOR A. E. EKINS, F.C.S., pharmaceutical chemist, is mentioned as the probable Mayor for the Borough of St. Albans for the coming municipal year.

MR. EDWARD AUDUS HIRST, of the firm of Hirst, Brooke & Hirst (Limited), wholesale druggists and manufacturing chemists, Leeds, is a candidate for a vacancy in the Leeds City Council.

MISS GEM has been appointed dispenser to the Cumberland Infirmary, Carlisle. She was a student at the Westminster College of Pharmacy. In July she obtained the Assistants' certificate at the Apothecaries' Hall.

THE name of Colonel Clifford Probyn (Messrs. Hooper & Co., Pall Mall) is mentioned in connection with the retirement of the Duke of Norfolk from the Mayoralty of the City of Westminster. Colonel Clifford Probyn would make an excellent mayor. He was for twenty-five years a member of the old St. James's Vestry, and, besides having held many other public offices, is at present senior Alderman of the Westminster City Council, and is personally popular with members of all shades of opinion. It is anticipated that the Mayor of Westminster, in the Coronation year, will be amongst the recipients of Royal favours.

பேர்தேவாஜி - 27-7-2009

It is in Tamil, and translated reads:—"1 bottle of castor oil for coolies."

Birth.

BENNETT.—At 8 Main Street, Caherciveen, Ireland, on September 23, the wife of David Smeaton Bennett, M.P.S.I., of a daughter.

Marriages.

CARLETON—HOLMES.—On September 10, at the Methodist Church, Knock, Belfast, by the Rev. James Robertson, D.D., Goodwin H. Carleton, M.P.S.I., to Elizabeth Maude, second daughter of the late Hugh Holmes, Londonderry.

EPPS—CARTER.—On September 21, at the Unitarian Christian Church, Effra Road, Brixton, by the Rev. F. W. Stanley, James Washington Epps, pharmaceutical chemist, eldest son of Hahnemann Epps, of 95 Upper Tulse Hill, S.W., to Maude Mary, elder daughter of Henry Carter, of Rawdon Lodge, Clapham Park, S.W.

GIBBINS—CRADDOCK.—On September 24, at the Parish Church, Kibworth Harcourt, Leicestershire, Richard Gibbins, of the firm of Davies, Gibbins & Co., Derby, to Fanny Craddock, of Kibworth Harcourt.

REYNOLDS—HILL.—On September 17, at the Congregational Chapel, Battersea Park, London, William Colebrook Reynolds, B.Sc., of Dartford, son of Freshfield Reynolds, of Gloucester, to Florence Kate, daughter of George Henry Hill, of Battersea.

WILSON—PARSONS.—On September 14, at Wesley's Chapel City Road, by the Rev. Dr. Allen, ex-President of the Wesleyan Conference, James Wilson (London manager of the York Glass Company, Limited), to Lilla Jones, eldest daughter of the late John Parsons, of 35 Ashley Road, London.

Deaths.

DAWSON.—On September 22, at High Street, Slough, after a long and painful illness, the wife of Mr. W. Dawson, chemist and druggist. Aged 55.

FARMER.—At Castle Donington, on September 12, Mr. James Farmer, pharmaceutical chemist.

GARDINER.—At 43 Kenilworth Square, Dublin, on September 17, John Alexander Gardiner, registered druggist. Aged 51. Mr. Gardiner was born at Dunmurray, Belfast, and obtained his first experience of the drug-trade in Sir James

Haslitt's business there. He went to Dublin in 1871, and entered the establishment of Messrs. Boileau & Boyd as a junior. His business capacity was such that he progressed from one position to another until he got a partnership in the firm, all the while travelling over the country in its interests. Some years ago the firm was converted into a limited company, when the three



businesses of Boileau & Boyd, Samuel Boyd (Mary Street), and Boyd & Goodwin (Merrion Row) were amalgamated, and he became a director. He was an active member of the Masonic order, and also held office in the Abercorn Knights Templars Preceptory. He was highly esteemed by the drug-trade throughout Ireland, and his comparatively sudden death (he was only ailing a week) is much regretted. The funeral took place at Mount Jerome Cemetery on September 21, the *cortège* being of an imposing and representative character. Amongst those present were

the directors of Boileau & Boyd (Limited), Mr. G. D. Beggs (President of the Pharmaceutical Society of Ireland), Mr. J. I. Bernard (Vice-President), and many other pharmacists and drug-trade representatives, besides Dublin medical practitioners and Messrs. Boileau & Boyd's staff.

In connection with Mr. Gardiner's death, Messrs. Boileau & Boyd have issued a circular in which they say: "For thirty years he has faithfully and honourably served our firm, rising from a junior position in the house to be one of the directors. It will be difficult to fill his place, but at an early date our representative, Mr. Hugh Alderdice, will take up the journey."

HUTCHINSON.—At Bristol, on September 12, Mr. George Hutchinson, chemist and druggist. Aged 48.

MCINTOSH.—At Feargan, Liberton, on September 20, Mr. Alexander McIntosh, chemist and druggist. Aged 28. Mr.

McIntosh served his apprenticeship with Messrs. Paton & Finlay, Edinburgh, and passed the Minor examination in October, 1894. He had for the past four years been associated with the firm of Messrs. Gibson & Co., Edinburgh, first as manager of their Lothian Road branch, and latterly as a partner of the firm. Those who had an opportunity of knowing Mr. McIntosh and of meeting him in a business capacity, respected him for his upright conduct and his unselfish and kindly nature. He had been ailing for two months only, and his early death is much regretted.



O'CALLAGHAN.—On September 21, at the Drug Hall, Youghal, co. Cork, Mr. Timothy Joseph O'Callaghan. Aged 38. Mr. O'Callaghan had been for some time past manager of the Drug Hall in Youghal. He was slightly ailing for a week, but was at business on September 20 last. At 6.30 on that evening he said he felt ill, and next morning succumbed.

PRICE.—At Athy, Co. Kildare, on September 15, Mr. Charles Eustace Price, pharmaceutical chemist, after a very short illness. Mr. Price was a native of Bangor, co. Down, but had been in business in Athy for seven years, and during that time he won the esteem of all who came in contact with him, without distinction of class or creed.

ROBERTS.—At Yeovil, on September 14, Mr. W. H. Roberts, for many years dispenser at Yeovil Hospital. Aged 56. Mr. Roberts served in the Army Medical Corps through the Egyptian campaign, where he was wounded in the foot, causing permanent lameness.

Business Changes.

MR. H. G. RIX, chemist and druggist, is succeeding to the business of Mr. J. T. Mountain at Caversham.

MR. F. COOK, chemist and druggist, of Liverpool, has bought the business of Mr. H. Richards at Warminster.

MR. J. T. MOUNTAIN, pharmaceutical chemist, Caversham, has bought the business lately carried on by Mr. A. G. Green at Bicester.

MR. A. BROOKES, chemist and druggist, of Stalybridge, has acquired the business of Mr. B. Morgan, at 9 Derby Street, Barton-on-Trent.

VICTORIAN TARIFF CHANGES.—The following decisions have been rendered by the Customs authorities of Victoria:—

Appliances or instruments surgical—viz., Lingner's disinfecting apparatus, free; barytes, white, free; brilliantine, for use with boots and shoes, 25 per cent. *ad val.*; dextrine maltose (per cwt.), 1s.; glass-stirring rods, 25 per cent. *ad val.*; fusel oil, free acids, acetic, Beaufoy's is under 30 per cent. acidity, 3d. per pint; Block juice, liquorice, crude or refined, when not in confectionery form, free.

At the Groceries.

OF all the trades exhibitions which take place during the year there can be little doubt about the Exhibition and Market of the Grocery, Provision, Oil, and Italian Warehouse Trades being the most successful. This is doubtless due to the fact that the Exhibition covers such a large range of trades and so many interests are concerned. The interest which is taken in this Exhibition by chemists is peculiar. Several representatives informed me in the course of my visit that they had been astonished at the number of chemists, not only from London, but from various parts of the country, who had called upon them and left orders. However painful this identification of the profession of pharmacy with the grocery trade may be to the pure pharmacist, it shows that the drug-trade is not devoid of men who lose no opportunity of doing business in the best way open to them. There are over 250 exhibitors at the Grocery Exhibition at the Agricultural Hall this week. Besides the terrace of shops erected by F. E. & G. Maund (Limited) in the East Gallery, there are many other things to interest the casual spectator. The window-dressing competitions are mainly objects of keen and critical interest to the professional visitors, but the operations revealing the manufacture of "Buttercup" metal-polish, for instance, from the preparation of the tins to the finished and filled product, is keenly followed by all. In the Minor Hall the CHISWICK SOAP COMPANY have erected a working exhibit showing complete model plant for the manufacture of the polish, including a tin-decorating machine (capable of decorating 87,500 lids per hour), cutting and trimming machines for stamping and forming the tins, pans for preparing the polish, and the operations of filling and packing and finishing off.

Although it may be concluded that by far the greatest proportion of the 250 exhibitors might be classed under the headings

NUTRITION, FLAVOUR, AND REFRESHMENT

(as represented in cheeses, hams, and other necessities of life), still this caption may be made to include various preparations identified with pharmacy. One of the special positions is covered by the pavilion of BOVRIL (LIMITED). This is a popular and pleasant resort, and the cup which cheers and strengthens without inebriating appears to be in as much favour as ever. All the standard Bovril preparations, as well as Virol, are to be seen there, and in keeping with its surroundings are Kudos cocoa and wild-cherry sauce. Near by is LIEBIG'S EXTRACT OF MEAT COMPANY (LIMITED), with the benevolent countenance of Liebig in bronze beaming on the many preparations which this discovery has produced. Lemco, Oxo, and Peptarnis are shown, and a special nickel-plated urn in the form of the Eddystone lighthouse, which is used in catering establishments for the distribution of Oxo. Coffee-essences and culinary-essences are shown by T. & H. SMITH & Co., T. SYMINGTON & Co., and R. PATERSON & SONS. Malt-vinegar, lime-juice cordial, and coca-wine are shown by BEAUFUX & Co.; while the TOWER TEA (LIMITED) have an excellent display of their packed teas in a stall got up to resemble a portion of the Tower of London. COX & Co. (LIMITED) are makers of non-alcoholic wines. They put up an excellent orange wine and also quinine wine, and the representative assured me that chemists in various parts of the country found their cherry punch an excellent adjuvant for nauseous medicines. They also put up Austin's liver-salt and a health salt. Hall's wines, Keystone Burgundy, and the various wines, whiskies, and preparations of STEPHEN SMITH & Co. (LIMITED), are popular with the grocery trade, judging by the volume of callers at their attractive stall. This firm, having 32,500 tickets for free distribution to the trade, may have something to do with their press of visitors. Coomb's "Eureka" malted food and other domestic preparations are shown by COOMB'S EUREKA FLOUR COMPANY (LIMITED). INTERNATIONAL PLASMON (LIMITED) have two fine shows—one in the Main Hall, where the Plasmon preparations are explained; the other in the Minor Hall, where they may be tasted. Both are large exhibits. PRIDEAUX'S PURE

CASEIN AND LIFE FOOD COMPANY (LIMITED) have a pretty little stall showing Casumen and its preparations. Armour's Extract of Beet in jars, Vigoral, and Armour's pepsins are exhibited by ARMOUR & Co.; beef and vegetable tablets, their latest preparation, is put up in tins to sell at 1s. each. HENRI NESTLÉ does not allow his Swiss milk, infants' food, and other nutrients to be overlooked; and the free jellies which are being distributed by J. G. COX (LIMITED) cause inquiries into the merits of this old-established firm's gelatins. Biwin is put forward under brilliant auspices by F. L. BORTHWICK & Co. Free Biwin is distributed hot. BOISSELIER'S chocolates and Vi-cocoa are objects of much interest to visitors, and the display is so well set out that it cannot be missed. POWEN & MCKECHNIE are showing St. Raphael Quin-Quira; POULTON & NOEL their beef-essences; KEEN, ROBINSON & Co. mustard in various stages of manufacture, and Robinson's barley and groats. In the gallery a pretty little show is made by the ROYAL STANDARD WINE COMPANY, and Mr. Holloway is well pleased with the business he is doing. The "Standard" brand of beef-and-malt wine is going well, and the company make a point of the fact that they pay carriage and make no charge for either cases or bottles, besides obtaining wine-licences for their customers. The SWISS MILK SOCIETY have a show of their "Cow's Head," "Swiss Farm," and "Edelweiss" brands of milk. NEWBALL & MASON require 76 feet of frontage to adequately display their goods. Coffee-essence is their winter speciality, and many chemists stock it, we were not surprised to learn. The display-cards (always a strong feature with this firm) sent out to help the sale, picture a neat and natty waitress bearing a tray of coffee-cups. The device is striking, and the moveable tray is ingenious. A very pretty stall, to the right of the main entrance, is utilised by ALFRED BIRD & SONS (LIMITED). An assortment of actual dishes made from Bird's culinary specialities are to be seen and tasted.

Several important shows of

PERFUMERY AND TOILET ADJUNCTS

are to be noted. One of the special positions is held by the ERASMIC COMPANY (LIMITED), and J. CROSFIELD & SONS (LIMITED). It is a four-lobed pavilion, two of the lobes being used to make an effective show of the Erasmic soaps, perfumes, and powders, and the other two for Crosfield's household and toilet soaps. The CROWN PERFUMERY COMPANY have the stand which created such a *furor* at the Chemists' Exhibition, but the position is not so advantageous for display as at Covent Garden. The preparations of the "Crown" series are on view, and many new perfumes (principally Carnatia) are reported as selling "like hot cakes" for Christmas trade. In point of size the VINOLIA COMPANY (LIMITED) are first. They have three separate exhibits. The principal (Bay 23), where Mr. J. Mawdesley presides surrounded by nearly 1,000l. worth of plate-glass cases, is devoted to the latest perfumery creations and toilet dainties. Six large glass cases show six different samples of window-dressing with Vinolia preparations. There are many fine perfume-caskets, each containing one or two cut-glass bottles of perfumes of the latest designs. The latest thing in cheap toilet-soaps is the "Lullaby" brand in twopenny cakes. These are put up twelve tablets in a carton, and may be had in eight different odours. The other two exhibits are employed to push the Vinolia household soaps. As might be anticipated, the exhibit of BLANCHE LEIGH has a charm all its own. The stand is prettily draped, and the massive and gorgeously framed pictures (intended for shop-display to customers with favourable orders) attract the multitude. The cheaper lines of toilet-soaps are being pushed this week, and the glass and nickel-framed counter-display cases, which are given away under certain conditions, are an extra inducement. The "Dylissia" toilet-preparations are shown by DURANT & Co., who have some special Xmas lines worth looking at. The fortunes of the AMERICAN TOILET COMPANY are safe in the hands of a representative who possesses all the qualities of eloquence, perseverance, and push which we are accustomed to look for in our cousins. He packed a concrete array of facts and figures about the Jergen's toilet-soaps into a three-minutes' conversation which bewildered me. The principal lines shown are "2d lines in soaps, each cake weighing 3½ oz., of seven different odours, or

a cheaper (2d.) line, each cake weighing 3 oz. The wholesale prices, besides being subject to the usual trade discount, are amenable to 2½ per cent. for cash." Exceptional display is also made of a mammoth cake of Castille soap (weighing 7 oz.) to sell at 2d. Boxed goods include sweet violet, blush-rose, carnation-petals, and zenobia toilet-soaps, and soap-monkeys (in brown) and perfume-bottles (in soap) are put forward for lovers of the unorthodox. In the Arcade entrance, CUSSONS, SONS & Co. have a fine display of packed goods. Mr. J. W. Cussons (chemist and druggist, late of Ossett) and his brother are in charge. This firm are packers of castor oil, glycerin, camphorated oil, seidlitz-powders, custard-powders, &c., and their display is attractive. At the stall of TIDMAN & SON (LIMITED) we found a new Tidman's salt—a table-salt this time. It is a fine, white powder, and is said not to cake. It is put up in attractively decorated tins, so chemists ordering "Tidman's salt" will require to specify "sea" or "table" in future. Many Tidman novelties for Xmas trade are to be seen, and a multitude of druggists' sundries.

In the section which we may classify as that containing articles for

CLEANSING AND RENOVATION

the manufacturers of metal-polish predominate. Of these RAIMES & Co (LIMITED) have, as usual, an effective display of the burnishing properties of Globe metal-polish. The scheme of decoration at this stall is white, with blue-velvet hangings, and a lady attendant is attired in a startling costume to correspond. The BLUEBELL POLISH COMPANY are showing their liquid metal-polish in a little corner stand which is studded with brilliantly polished brass rings, holding an electric lamp in the centre of each. Coronet plate-powder is also shown there. Nixey's blacklead, nixeline, and a patent revolving money-till are amongst the things shown by W. J. NIXEY. The preparation of Buttercup metal-polish has already been alluded to. DAY & MARTIN (LIMITED), besides their world-famed blackings, are showing a black writing-ink, for which exceptional non-corrosive properties are claimed. The NUGGET POLISH COMPANY (LIMITED), RONUK (LIMITED), and the SCOTS FURNITURE POLISH COMPANY are showing articles for polishing of a somewhat similar character. The latter company have besides a display of Incandescaline, a fluid for spraying incandescent mantles, which is said to strengthen the mantle and revive the light. The XLCOR POLISH COMPANY, besides blackings, boot-polishes, and oakalines, are exhibiting stick wax and heel-ball. Household and disinfectant soaps are shown by C. THOMAS & BROTHERS (LIMITED), by JEYES' SANITARY COMPOUNDS COMPANY (LIMITED), and the PETROLEUM PRODUCTS COMPANY (LIMITED). The UNITED ALKALI COMPANY (LIMITED) are showing the Hazelhurst Soap-works preparations, which include "Red Maid" soap, "Protector" carbolic soap, Cashmere toilet soap, and Acme complexion soap. The IVORY SOAP AGENCY are showing their floating soap and Tar-tar soap, a medicinal soap containing pine-tar. The display of the CHISWICK SOAP COMPANY represents a clever model of *Shamrock II.*, made up of various-sized tins of the company's soaps. The yards are represented by strings of Buttercup metal polish. "Fo get-me-not" paste made by this firm is a combined furniture-cream and wax-polish. Fels-naphtha soap is effectively shown by the SALES COMPANY (LIMITED). The soap contains naphtha, and is said to be a most effective remover of dirt and grease from woollens and flannels. The PARAZONE COMPANY (LIMITED) are showing Parazone bleach, camphor, ammonia and Seretta powder in a neat little stall to the right of the main entrance, while H. HEATON & Co. have got Heaton's glycerin and borax dry soap in nicely decorated boxes, and borax and ammonia dry soap in boxes, packets, and drums. The MAYPOLE COMPANY (1859), LIMITED, have a striking triangular pavilion just opposite the main entrance. Besides the Maypole soaps, toilet powder and a large assortment of cheap perfumery are shown. Queen of the Maypole and Savon Oriole are the latest toilet soaps. Tints and dyes for curtains, laces, silks, &c., are shown by the HARPURHEY COLOUR COMPANY (LIMITED). These are all liquid dyes put up in penny bottles. White enamel gloss, "Evoc" starch, and "Evoc" blue, shown by Mr. G. A. WILLIAMS (who, by the way, is a chemist and druggist) in the Minor Hall, succeed in attracting the attention of the lady visitors. A lady attendant is present, who gives

practical demonstrations of the use and virtue of the enamel gloss. Frzesi is also shown by Mr. Williams. It is described as "desiccated egg and bread-crumbs, a handy preparation for fried fish."

SHOP-FITTINGS AND ACCESSORIES.

Most of the shop-fitting exhibits pale in significance before the four or five colossal shows made by F. E. & G. MAUND (LIMITED); but good-class shop-furniture is displayed by PARNALL & SONS (LIMITED) and F. SAGE & Co. (in the gallery). H. C. SLINGSBY and the BRISTOL WAGON AND CARRIAGE WORKS COMPANY (LIMITED) show hand-carts and vans in great variety. FARROW & JACKSON (LIMITED), besides their soda-water machinery, have marble-fountain cabinets on view. The 1,000/ soda-fountain is again shown by N. W. STILES & SON in the main hall and a smaller fountain in the gallery. Both are doing a big business in American drinks. The fountains of ROBERT GREEN & SONS, with Mr. A. E. Bolshaw, chemist and druggist, in attendance, are also attracting considerable attention.

ANIMAL NUTRIENTS.

The welfare of the animal kingdom is represented in the ever-increasing list of articles to be seen at the stall of SPRATT'S PATENT (LIMITED), not only foods to fatten but medicines to cure canine or feathered favourites being shown in apparently endless variety. The "OLD CALABAR" BISCUIT COMPANY (LIMITED), WALKER, HARRISON & GARTHWAITES (LIMITED), W. G. CLARKE & SONS, and R. HYDE & Co. have exhibits of a somewhat similar but less imposing character. THORLEY'S foods for cattle and horses are shown in a corner of the east gallery.

CASH-KEEPERS.

The usual contrivances for avoiding the loss of cash are to be seen. These are represented by THOMAS O'BRIEN (with four varieties of his check-till), G. H. GLEDHILL & SONS (LIMITED) (with several kinds of check-tills and a combination desk and till), and the BRITISH MACHINE COMPANY (LIMITED) in the gallery; while the NATIONAL CASH REGISTER COMPANY (LIMITED) are demonstrating the wonders of their autographic and adding registers in Bay 11. The representatives of the LAMSON PARAGON SUPPLY COMPANY (LIMITED) are kept busily explaining the merits of their duplicating counter-books and letter-books. A large coloured picture of the works at Canning Town adorns the stall.

MACHINERY EXHIBITS

include three types of the Crossley gas-engines in motion exhibited by CROSSLEY BROTHERS (LIMITED), who have also two of the Dowsing radiant heat apparatus under their wing; the "Stockport" gas-engine, shown by BILBIE, HOBSON & Co., and the "Rapid" automatic scale for weighing sugar or powders of any kind in quantities of from 1 lb. upwards. This machine, which is 13 x 15 inches and 28 inches high, is portable, and requires no power to operate it. The scale is fed from a hopper fixed on an upper floor with chute connected direct. The bag to contain the quantity to be weighed is placed in the cradle of the scale and the slide or "cut-off" pressed back. A considerable volume at first rushes into the bag, but this is automatically cut off just before the required weight is in the bag, and a smaller volume trickles in until the exact quantity is required, when it automatically stops. The scales, which can be operated by a lad, have been approved by the Incorporated Society of Inspectors of Weights and Measures, and chemists with a packing business would doubtless find them time-savers.

SUNDRIES.

In one of the side galleries, J. PHILLIPS & SONS have fitted up a sponge-built reception-room which attracts the wayfarer. Selected and packed consignments of sponges for the grocery-trade are specially shown. These include the honeycomb, fine Turkey brown, Turkey wool, Florida, grass, velvet, and Egyptian varieties. The assortment of articles displayed by W. B. FORDHAM & SONS (LIMITED) have been reinforced recently by Lnce's Jersey eau-de-Cologne, for which this firm have been appointed agents. Selvyt, Seccotine, and Sapolio are of interest to all, while the unbreak-

able properties of Marshall's giant cement are demonstrated by a 56-lb. weight banging to a cemented earthenware plate. Filtration, disinfection, and ventilation are taught at the stand of J. DEFRIES & SONS (LIMITED), where pictures of the *Ophir* (with Pasteur-Chamberland filters on board) predominate. Several artistic table-fountains for spraying perfumed water are shown. DAVID LLOYD has a patent bin and show-case, which is useful as well as ornamental. Samples may be shown in the top case, while the bulk is kept in the lower part, which is dust and fly proof. "Sudden Death" insect-powder in tins of various sizes is shown by H. WHITE & CO. This powder is nonpoisonous, and is said to be more efficacious than any of the usual insecticides. A burly beefeater draws attention to the stall of SADLER, FIRTH & ROSS (LIMITED), and their old English mustard (made from English seed), crushed linseed, and linseed-meal. At this stall are to be seen mustard oil and mustard-bran, and Sadler's mustard-oil embrocation—all nicely produced preparations. In one of the side galleries a number of roaring lions direct attention to Percival's phospho-tonic, Dejestol (an American remedy for indigestion), and the latest manufactures of AERATORS (LIMITED). In the Arcade entrance the PATENT BOTTLE TICKET COMPANY (LIMITED) are showing metal price-tickets with clips for fixing to the tops of perfume-bottles and such like. These tickets are nicely lithographed in gold and colours directly on to the metal, and may be washed like glass with no fear of the colours running. They are in various shapes and patterns.

COMPETITIONS.

The promoters of this Exhibition are always strong on competitions. This year there are prizes given for the best displays of British honey. There are also the usual window-dressing competitions, and medals and prizes are offered for recognising, stating the uses of, and giving the current buying value of, sundry samples of oils submitted by the committee. But perhaps the most important is an open competition for a prize of 10*l.* 10*s.* and diploma for a gold medal, for the best constructed safety lamp (the wholesale cost not to exceed 1*s.* 3*d.*), in which mineral oil is to be burnt.

Pharmaceutical Society of Great Britain.

MAJOR EXAMINATION.

THIS examination commenced in London last week. On Saturday, September 21, practical chemistry was taken, and on Monday papers in chemistry and physics. On Tuesday the papers were in botany and materia medica. The following are abstracts of the work given:—

Practical Chemistry.—(1) Qualitative analysis of mixture containing three basic and two acid radicals; (2) gravimetric determination of iron; (3) preparation of crystallised oxalic acid from 10 grammes of cane sugar.

Chemistry.—Six questions to be answered, two at least from Part II. Part I. contained five questions, viz.:—(1) History of nitrous oxide; (2) relation of sulphur and chromium; (3) definition of "peroxide" with properties, &c.; (4) alum and its manufacture; (5) manufacture of sodium by electrolysis. Part II.—(6) Synthesis of propionic acid; (7) principal components of non-volatile vegetable oils; (8) Sandmeyer's reaction; (9) behaviour of phenols with aromatic alcohols.

Physics.—(1) 2 lbs. of lead at 100° C was placed on ice. How much ice melted? (2) define thermal unit, specific heat and temperature; (3) describe "index of refraction"; (4) convex lens; (5) action of Daniell cells current on solutions of silver nitrate, sulphuric acid, and lead nitrate consecutively, with weights of isolated products; (6) determination of temperature of oil bath with a weight thermometer.

Botany.—Three questions to be attempted.—(1) On chief modifications of cellulose in plants; (2) cambium and its types; (3) distinction between ovule and seed, and ovary and fruit; (4) part played by starch in nutrition of plants. *Practical work.*—Three subjects given—viz. (1) Identification and description of a seed; (2) preparation of a longitudinal section of material given and reference to group of plants; (3) description of two specimens of angiosperms.

Materia Medica.—(1) Description of assay of liquid extract of nux vomica; (2) characteristics of ammoniacum and storax; (3) preparation of tannin from galls. *Practical work.*—(1) Preparation of transverse and epidermal sections of a medicinal leaf; (2) identification and report on quality of a sample of powder.

Trade Notes.

MESSRS. BURGOYNE, BURBIDGES & Co., Coleman Street, E.C., have been appointed contractors for medicines to the Army for the next three years.

MESSRS. CRESSWELL BROTHERS & SCHMITZ, sponge importers and merchants, of 1, 2, 18, and 19 Red Lion Square, London, have appointed Mr. A. Chadwin as their city and export representative. Mr. Chadwin has been with the firm for fifteen years, and knows the business well.

"PRIMUS" LANTERNISTS' POCKET-BOOK.—This popular publication of Messrs. W. Butcher & Sons, is now ready for the 1901-2 season. It is prettily bound this year in sage-green canvas, with pencil inserted in the back loop, and, in addition to writing-paper diary pages for engagements, contains a great deal of information that lanternists want to know some time or other, and a directory of dealers. The price to the trade is 4*s.* per dozen.

INCREASED PROFITS ON HUNYADI.—The prices of the popular aperient water Hunyadi Janos have been revised by the proprietor, Mr. A. Saxlehner, of Budapest, and in future retailers will have a larger margin of profit on this commodity. In order to ensure that this increased profit will reach the retailer, Mr. Saxlehner has fixed the minimum retail prices and drafted an agreement to which all dealers must conform. Fuller particulars of the new prices will be found in our advertising pages. Messrs. Ingram & Royle (Limited) will charge the same price.

PHOTOGRAPHICS.—The catalogue of photographic apparatus and materials just issued by Messrs. Marion & Co. (Limited), of 22 and 23 Soho Square, W., is a bulky volume of 304 pages. The apparatus section (including cameras and lenses, lanterns, microscopes, and other optical goods) is the most important, judging by the space devoted to it, but "Albums, Frames, Publications, &c.," take up a respectable number of pages, and not the least interesting is the section on "Accessories and Backgrounds." The book is well printed and copiously illustrated, and there is a useful and comprehensive index.

BOTTLES.—We have received from Messrs. Kilner Brothers (Limited), of King's Cross, N., a copy of a new illustrated catalogue and price-list entitled "Glass bottles," which they have just introduced. The catalogue, which is strongly bound and excellently produced, comprises in one volume the three lists issued to the public—a decided advantage to the general buyer. List D deals with bottles for mineral-waters, wines, &c.; E contains a full assortment of glass containers for confectionery, preserves, pickles, vinegar, oils, and so forth, while F is devoted to drug, dispensing, feeding bottles, and bottles for proprietary articles, or for show. Sundries, such as breast-exhausters, glass funnels, measures (in glass), and gallipots and covered pots (in earthenware), are included in the last section.

MR. W. WATSON WILL, F.C.S., F.L.S., Principal of the Metropolitan College of Pharmacy, has printed and published an "Annual Record" of the College, which makes a very interesting pamphlet. It is intended chiefly for past students, but to others it gives an indication how attachment grows round a school of pharmacy. After a couple of pages of College news, which tell of changes in the staff, there are in the "Record" four pages giving interior views of the College and laboratories, and these are followed by a report of the seventh annual dinner of the students of the College, at which Mr. W. Lamond Howie, F.R.S.E., presided, his address on the occasion being printed in full. Then follow the College examination-papers for 1900-1901, and the lists of prizemen, several pages of names of "Metro." students who are now in business, and of some who are abroad, as well as the names of "Metro." men who have joined the R.A.M.C. in the South African campaign—namely:—

Messrs. Colin F. Aldrich, George T. Branch (Staff Medical-Sergt. 3rd Railway Pioneer Regt.), Joseph R. Cowburn, E. S. Grennan, Frank Hallam, Henry G. B. Legge (Hospital-ship *Maine*), William M. B. Matthias (returned home after being severely wounded at Wepener), Robert J. Rogers (died of enteric), Ellis Tomlin, John W. B. Wigginton, and Edward W. Wynne.

Those who have not received a copy of the "Record" may get one from Mr. Will on application.

Veterinary Notes.

By M.R.C.V.S.

ADMINISTERING MEDICINES.

THE administration of medicines to animals is largely a matter of control, and it is proposed in this article to show some of the methods of managing patients both for administering medicaments and the performance of operations, —some of them of minor importance and within the capacity of the dog or cat owner, and others which should not be attempted by any but the qualified veterinary surgeon, if one is to be had. The output of vets. has of late been unequal to the demand, and there are many stations in the colonies where amateur surgeons must act for themselves, or leave animals to suffer and to die, for want of assistance which it is quite possible for any person of good nerve to afford.

How many folks bungle over the simple matter of giving a pill or a powder to a dog or a cat? To the initiated no appliance whatever is needed for either operation. Those unaccustomed to give these forms of medicament may get a hint from figs. 1 and 2. In the former the dog's hind



FIG. 1.



FIG. 2.

legs are occupied in keeping his footing on the ground; his front ones are held by a boy; the kennelman grasps the body of the animal between his knees, and so has both hands at liberty to open the dog's mouth. The living subject will remain steady for a reasonable time, while a pill is dropped into his mouth (as far back as possible), or during such minor operations as removing a fish or poultry bone lodged between the grinders or in the back of the palate. The tartar on the teeth can be scaled while under this simple form of restraint, and many will ask for no more control if teeth have to be extracted or tumours dissected out. Almost any dog may be "pilled" by pressing the finger and thumb of the left hand over the cheeks, opposite the tusches or large pointed teeth, when the animal will open his mouth, and the operator will carry the lips over the points of the teeth, making it impossible for the dog to close his mouth without biting his own lips or cheeks. While his mouth is thus propped open nothing is easier than to push a pill back on to the roof of the tongue with the disengaged hand. It should be done somewhat forcibly, as there is no danger of sending it the wrong way, and the further back it is placed the less likely is it to be returned. It is easy to know whether a dog has swallowed or not, as he invariably licks his nose when deglutition has taken place. In fig. 2 the kennelman has taken advantage of pussy's habit of clinging to the edge of a table in the hope of springing off; so occupied is her mind with this thought that she will not think to scratch the man, who is about to give a fluid medicine by pursing out her cheek. If he held her in his lap or in the middle of a table she would perform like the sweeps of a windmill, and fasten

her talons into the operator's fingers. Advantage is taken of this peculiarity of cats to such an extent that the writer has seen many strong "toms" castrated, while holding on to the edge of the operating-table, with someone merely pressing down on the neck. Fig. 3 does not look like physicing at all, but the patient—a highly nervous one—is receiving, drop by drop, a concentrated fluid medicine from the finger of the person nursing her. Electuaries are given in this way, when, as often happens, the owner has no one to help him to administer medicine and employs guile rather than force. While engaged on this paragraph the writer was called away to a cat with an abscess in the flap of the ear (the ears are very liable to serious abscesses from injuries), and having to lance it boldly, and consequently cause sharp momentary pain, the novice might be surprised to learn that no appliance but a bath-towel was employed as a means of control. Well wrapped round the neck with plenty of soft material a cat is harmless; indeed, she helps to fix herself by thrusting her talons into the abundant material which will hold them, but not suffer them to pass through and wound the person holding her. This plan is more convenient than either of the previous methods for dressing cankered ears, or performing any minor operation upon warts or excrescences on this portion of the animal; safety to the assistant and to his clothing are both obtained in the above simple way. Stitching up a wound on the head, torn eyelid, and many other things will readily occur to the veterinary student and cat-fancier, while employing one or other of the methods of control above described. Fig. 4



FIG. 3.

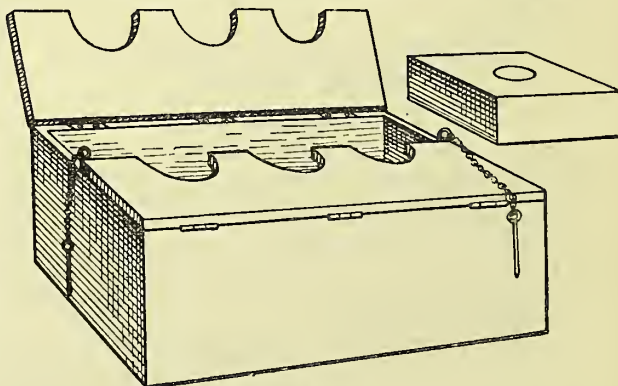


FIG. 4.

explains itself: it is adopted at the London Institution for Lost and Starving Cats, and is sold to the public at 2s. 6d. —

The cat's love of her own basket is utilised to calm her fears, and while in it she may be persuaded to take a pill or powder; she will shrink back into it, and not try to jump out, as shown in fig. 5. The least serviceable thing with which to restrain a cat is the top-boot, which everyone has heard of, and no one in his senses would think of employing. Cats, one and all, detest being pushed head first into anything, even into their own favourite basket; one must sit them down in it, tail first. If it is desired to examine the hind parts of a cat, or

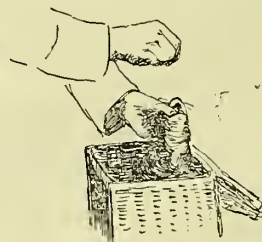


FIG. 5.

perform castration without an anæsthetic, lance a perineal abscess, suture a wound, or extract a fish-hook, the cat should be rolled up in a large blanket or other soft material, completely enveloped, and placed between the knees of a person in the attitude of fig. 6. The tail will be sought, and as much of the hind-quarters as needed brought out of the folds of stuff. It is quite possible to castrate a cat without a second person in this way, but it is much preferable if an assistant can be got to hold each hind leg, as high as the hock, and 3 or 4 inches apart, so as to leave room for the operator's fingers without tightening the perineum, as novices invariably do in holding pigs for this purpose. With the dog the wrapping is not needed, or not so much, but dog-doctors will tell you that they are quite as much in fear of dog-scratches as of cat-bites. These are of more



FIG. 6.

frequent occurrence among beginners than the converse, as everyone fears pussy's claws, while too often forgetting that her bite is both painful and dangerous. Panic-stricken dogs, endeavouring to escape from restraint, use their powerful nails as levers, and inflict severe wounds on the unwary.

Pills, powders, draughts, and electuaries have been briefly referred to, but there are other forms of medication sometimes employed, as the subcutaneous injection and the clyster. In order to keep a dog quiet during the time the needle is introduced under the skin a muzzle may be required. In every house where a dog lives a muzzle could be found until the muzzling-order was removed, and now it generally happens that another dog of a different size is kept, or the muzzle has disappeared. Better than any wire or strap muzzle is 6 feet of soft webbing, or, if this is not procurable, a couple of old bonnet-strings tied end to end, or a bandage, or soft old cord. This is passed round the face, and first tied under the jaw; then passed behind the neck and fastened at the back, below the ears. The dog is then secured from doing mischief with his teeth, and will devote his energies to getting off the tape with his front feet, if not restrained. The muzzle will give confidence to nervous persons, if only an enema is to be administered. This is best done with the dog on his feet, with an assistant to restrain him from going forward (the direction he will invariably take), while a ball-syringe, requiring but one hand, is used to throw up the medicament, and allow the operator a free hand to hold the dog's tail out of the way and make it a *point d'appui* at the same time.

The difficulty is not always ended when we have both made and given our pill, as all dogs are easily excited to vomition, and with quite a large number it is voluntary. The oil of male fern, once so much favoured by medical practitioners, is of little use to dog doctors, because the patient will invariably vomit it, whether in form of pill or



THE CLOVE HITCH.

draught. Taking advantage of the dog's habit of depressing his chin before he can perform the act of vomition, we secure him in a position which precludes the attitude being assumed. The taped muzzle, or clove hitch, as it is called, can be here adjusted, and if a curtain-ring is fastened into the junction over the face so much the better. From this

point we can attach a cord, and secure it to a beam or hook in the ceiling of the stable, giving the patient just enough rope to stand on all four legs without discomfort, but not enough to allow him to lower his head. Secured in this manner he cannot vomit, and in a short time the medicament will have passed beyond the possibility of return.

Hitherto reference has only been made to those means within reach of everyone, but veterinary surgeons—up-to-date ones—who do not pride themselves on acrobatic performances, have a number of appliances for holding dogs and cats with or without anæsthesia. Fig. 7 shows Mr.

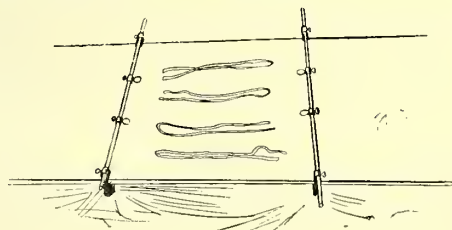


FIG. 7.

Gray's simple apparatus for holding a dog or cat outstretched on a kitchen table. It consists of two half-round rods, with screw-clamps at each end to fasten on the table, and in the middle

portions are small, movable screw-clamps with rings or spring-hooks on swivels. Four tapes, which are seen lying in the middle of the table, serve as attachments to each of the limbs. On the front limbs they are fastened immediately above the elbows, over

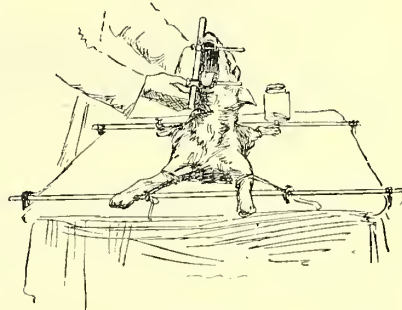


FIG. 8.

which they cannot slip, and on the hind limbs just above the hocks, where they are retained with the same certainty. Fig. 8 shows a dog fastened to Gray's rack, while his mouth is wide stretched with the same veterinary surgeon's patent gag. Secured in this way, any dental operation can be performed, or, with a muzzle in lieu of a gag, operations upon the eye or ear, neck, back, or limbs. If anything has to be done to the belly or the genital organs, rectum, &c., he has only to be turned over as seen in fig. 9. For some

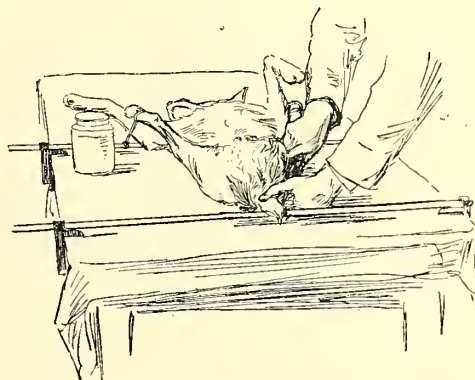


FIG. 9.

abdominal operations the hind legs must be stretched to the full—as, for instance, ovariectomy on the bitch—then the rack is shifted further along the table, and we get the atti-

tude seen in fig. 10. The cat can also be placed in similar positions by means of this apparatus. In fig. 11 a cat is shown taking chloroform from the mouth of a glass jam-bottle, having a layer of cotton-wool on the bottom, and

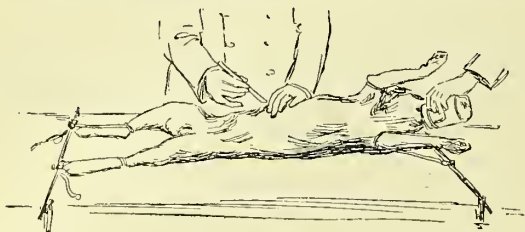


FIG. 10.

upon which a small quantity of the æsthetic has been sprinkled. The jam-pot is Mr. Gray's especial pride, among his many inventions, as he claims credit only for simplicity in apparatus, while quite a host of intricate muzzles have been patented, and never even paid the cost of the provisional protection. Another successful veterinary surgeon

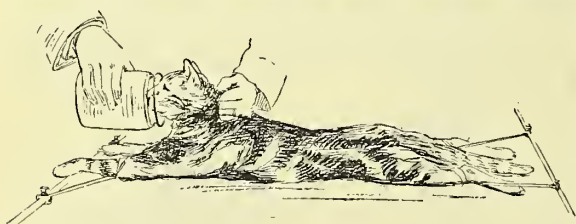


FIG. 11.

pins his faith to an old Gladstone bag, in which he immures the subject to be chloroformed, and forms his opinion as to the proper stage of æsthesia by turning the bag on its side and taking note if the occupant falls over or struggles to keep its feet. The bag answers the double purpose of a lethal chamber as well as a preparatory one for operations. There is some difference of opinion among chloroformists as to the rapidity with which chloroform should be given. Some like to rush their patient under quickly, as in the bag, under the belief that they come out more quickly for going under quickly; while other practitioners admit atmospheric air, and give the drug drop by drop. Fig. 12 shows an

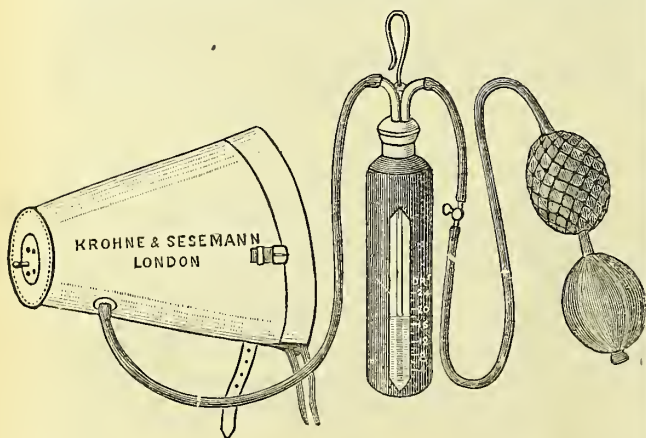


FIG. 12.

apparatus by Messrs. Krohne & Seseman, especially designed for this purpose. The ether-spray apparatus can be used in the same way as employed for human subjects and animals. Apparatus is all very well and very impressive, but most of it can be done without; and, after all, giving chloroform is only a matter of watching the respiration, and withdrawing

it as soon as the subject becomes limp or relaxes the voluntary muscles. The same may be said of the racks and dog-hobbles, for one has only to have a table with four legs, and four tapes long enough to tie to the patient's legs, to secure it in the spread-eagle fashion shown in some of the illustrations given in this article. [These sketches (except figs. 4 and 12) are drawn from photographs taken by the author.—Ed. C. & D.]

British Pharmaceutical Conference.

A MEETING of the Formulary Committee was held at 16 Bloomsbury Square, W.C., on Wednesday, September 18, at 5.30 p.m. Present: Mr. N. H. Martin, who presided, Messrs. G. C. Druce, F. Ransom, Harold Wilson, F. C. J. Bird, and W. A. H. Naylor. The minutes of the previous meeting were read and confirmed. On the motion of Mr. Harold Wilson, seconded by Mr. Bird, Mr. Martin was heartily thanked for his services during the past year, and asked to continue to act as Chairman of the Committee. Mr. Martin consented, and expressed the hope that the members would accord him the measure of support they had hitherto so freely given. Mr. Naylor was re-elected Secretary. The Chairman made a brief reference to the favourable comments passed by the press on the recently published "Formulary," and to the encouraging rate at which the volume had sold. The Secretary stated that the sale of copies by the third week in August had reached over 1,300, and that the printers had been instructed to supply an additional 500 at once. As the result of a discussion on the means to be used for collecting material likely to be of service in a future edition of the "Formulary," it was decided to ask a number of pharmacists to say what preparations, B.P. excepted, are most in demand, as shown by their prescription-books.

A meeting of the Executive Committee was held at 17 Bloomsbury Square, W.C., on Wednesday, September 18. Present: Mr. G. Claridge Druce (President, in the chair), Dr. Atfield, Messrs. N. H. Martin, E. M. Holmes, and W. A. H. Naylor (Vice-Presidents), Mr. J. C. Umney (Hon. Treasurer), Professor Greenish, Messrs. Atkinson, Collier, C. Tyrer, and E. White, Messrs. Ransom and Peck (Hon. General Secretaries), and Mr. Hearn (Assistant Secretary). Letters of apology for absence were received from Messrs. G. T. W. Newsholme, S. R. Atkins, E. H. Farr, C. Kerr, J. I. Bernard, W. Cummings, G. D. Beggs, W. F. Wells, and J. C. C. Payne.

A letter from Professor J. P. Remington, Chairman of the Committee of Revision of the Pharmacopœia of the United States of America, was read, acknowledging the receipt of a vote of condolence upon the death of Dr. Charles Rice, in which he said: "The loss of this eminent scientist, chemist, pharmacist, and scholar will be severely felt, not only in English-speaking countries, but throughout the world. Permit me, in the name of the Committee of Revision, to again assure you of its deep sense of appreciation of the kindly feeling which prompted the sending of the letter."

The President congratulated the Conference upon the most successful meeting recently held in Dublin.

Dr. Atfield proposed, and Mr. Naylor seconded, that "the Committee of Publication be not reappointed." This was carried. Mr. Martin proposed, and Mr. Holmes seconded, that the Hon. General Secretaries be appointed editors of the "Transactions of the Conference" for insertion in the Year-book. Carried.

The following were elected honorary members of the Conference:—Professor A. B. Prescott, University of Michigan, U.S.A.; Dr. David Prain, Director of Botanical Survey, Calcutta; Professor A. Ladenburg, University of Breslau, Germany; Mr. J. H. Maiden, Director of Botanic Gardens, Sydney; and Mr. C. R. Blackett, President of Pharmacy Board, Melbourne.

Dr. Atfield read a letter he had received from Mr. Alfred Siebold, telling of the death of Mr. Louis Siebold, late Editor of the Year-book. It was unanimously resolved to send a letter of condolence to the family, at the same time expressing the Committee's deep sense of appreciation of his long and valued services.

The election of new members concluded the business.

Swiss Pharmaceutical Relics.

By H. HELBING.

NEARLY ten years ago I gave a description in THE CHEMIST AND DRUGGIST (July 25, 1891, and January 30, 1892) of an old pharmacy and its contents which had been

which hangs from the ceiling cannot give the pharmacy that romantic aspect with which the sightseer at Nuremberg is involuntarily impressed.

Many of the vessels containing the drugs are Fayence, for which Switzerland, particularly Winterthur, was famous. The numerous specimens of the ware still in existence bear witness to the perfection attained in the art, which had already attracted attention in the beginning of

the sixteenth century, and attained the height of its renown in the seventeenth century, when these earthenwares were famous throughout the world. The pharmacy contains also a big stove of the same ware and period, which gives a vivid idea of the beauty of colour and glaze the ware has.

The bottles of the pharmacy are also richly decorated and partly of milk-glass made in Herzogenbussee. The windows contain beautiful coloured-glass paintings, dating from 1630 and 1667, one of them representing Christ as an apotheker. Numerous implements more or less connected with pharmacy are displayed on the dispensing-table and the side cupboards. Beautiful bronze mortars, big earthenware vessels which contained olive oil from Italy, balances of various sizes and ages are to be seen, and perhaps most interesting the small mills for grinding drugs and powdering chemical substances, which in many ways foreshadow our modern powder-mills and grinding-machines.

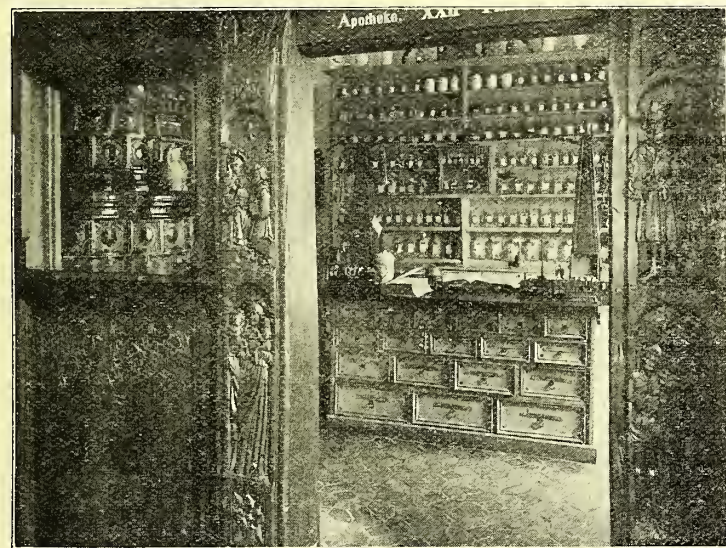
A small, compact, household medicine-chest, neat and handy for travelling, is also exhibited, and microscopes with clumsy leather coverings show from their style and appearance that they date from the first empire.

Taken as a whole, the pharmacy is simple, and impresses one as having been the world of a plain and dutiful pharmacist whose whole life was devoted to the conscientious compounding of medicine according to his lights and the knowledge of his time.

Competition Photograph.



HYSSOPUS NIGER. (Mr. Auberon Albert, Reading.)



THE ANCIENT SWISS PHARMACY

fitted up in the Germanic Museum in Nuremberg, and in which are preserved the implements of the art of pharmacy from the dark Middle Ages up to comparatively modern times, showing the mystic relationship between the alchemist, the pharmacist, and the chemist pure and simple.

This year I had an opportunity of visiting the National Museum recently opened in Zurich, which has been established by the Swiss Government, and as such is a central storehouse of all objects that bear testimony to the life, development, and industry of the Swiss nation from the remotest times up to the present day.

The Museum is so full of historic and art treasures that it well repays an extra day's stay in Zurich, and it has also a special interest to the pharmacist as it contains an old Swiss pharmacy complete in every detail. Thus, like the German National Museum, the Swiss National Collection indicates that the practice of pharmacy and the arts connected therewith was, centuries ago, a characteristic and well-defined calling which, from the prominent part it played in national affairs, is an essential feature of any representative demonstration of the past life of the country.

The wood fittings of the interior of the Swiss pharmacy, which comprises a room about 12 feet square, have been brought from the apotheke of the dismantled Benedictine cloisters at Muri, where they served during the time of the Abbot Gerold Heim (1723-51). Curiously enough the shop-fittings of the modern pharmacy still bear a marked resemblance to the old and characteristic furniture of this ancient dispensary, which proves how very conservative the pharmacist is in such matters. In many of the smaller German and Swiss towns and villages may, in fact, still be seen pharmaceutical interiors which also date back nearly a couple of centuries, and in which the ancient fittings still answer their purpose for the display and storage of modern medicaments.

Compared with the Nuremberg relic the Zurich apotheke is simpler in style, and does not, therefore, afford so many points of interest either from a general or a pharmaceutical view. In the Zurich pharmacy the art of dispensing is represented pure and simple, free from Middle Age mystery and alchemy, and even the conventional stuffed crocodile

Scientific Progress.

Preparation of Cyclocitral.—A patent has been granted to Haarman and Reimer, the ionone patentees, for the preparation of cyclocitral. To convert the normal derivatives of citral into the cyclo derivatives, the former are first condensed in the usual manner with compounds containing an amido group, such as primary amines. The condensation-products contain a normal citral nucleus, and are altered by treatment with concentrated acids. The cyclo derivatives are then easily broken down in various methods so as to yield the cyclocitral compound (*Chem. Zeit.*, 1901, 778).

Copaiba Resins.—Keto, working in Tschirsch's laboratory in the University of Berne, has made an examination of the resins of Maracaiho and Para copaibas. The results are, however, of very little interest, except in so far as they affect the copaivic acids. From the Maracaiho balsam, the acid yielded analytical results which agree well with either $C_{11}H_{16}O_3$ and $C_{10}H_{14}O_3$. The first of these formulæ doubled agrees very well with that of Strauss for his metacopaivic acid. But the two acids do not appear to be identical, and it is therefore proposed to call Strauss's acid *alpha*-copaivic acid, and the new acid *beta* copaivic acid. The latter commences to fuse at 85° , and is completely melted at 89° – 90° C, when it forms a colourless liquid. With Liebermann's reagent it yields a violet, passing to a blue, and then to a green, colour. With the Salkowski-Hesse reaction the chloroform is colourless, and the sulphuric acid is yellow, without fluorescence. From Para balsam the corresponding acid melts from 142° – 148° C., and gives analytical results which agree with the formula $C_{20}H_{30}O_3$. This acid is now named "paracopaivic acid." With Liebermann's reagent it yields an orange colour, which eventually turns grey. With Salkowski-Hesse's reagent the chloroform is colourless, and the sulphuric acid is yellow, without fluorescence.

American Storax.—Tschirsch and Von Itallie (*Archiv der Pharmazie*, 1901, 533) publish the results of an examination of a sample of American storax. A careful preparation of the free acid of the balsam gave crystals which melted sharply at 133° C., yielded benzaldehyde on oxidation with potassium permanganate, and gave analytical figures in exact agreement with the formula for cinnamic acid. The free acid thus appears to be pure cinnamic acid. A small quantity of a crystalline aldehyde was obtained, but could not be purified on account of the minute amount. It had a powerful vanillin odour, and gave the usual vanillin reactions. The solid constituent of the ester mixture melts at 44° C., and on hydrolysis yields pure cinnamic acid melting at 133° C., and cinnamyl alcohol. It is, therefore, clearly identified as cinnamyl cinnamate (styracin). The liquid portion of the esters was identified as the cinnamic-acid ester of phenyl-propyl alcohol. A resin ester was separated and examined, and found to be a combination of cinnamic acid with a resin alcohol of complex constitution, to which the name "styresinol" is assigned. Its formula is $C_{16}H_{26}O_2$. The quantitative results are as follows:—

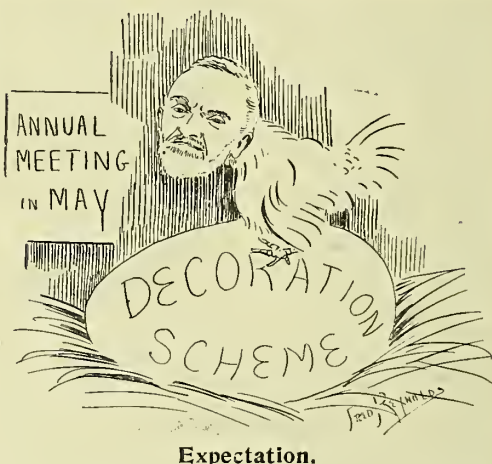
	Per cent.		Per cent.
Insoluble in ether	... 3.12	Free cinnamic acid	... 23.4
Aromatic esters	... 24.8	Styrol and vanillin	... 2.0
Resin esters	... 45.0		

The acid number of the balsam was found to be 89.3, the ester number 103.4, and the saponification number of the aromatic esters and styrol 205.1.

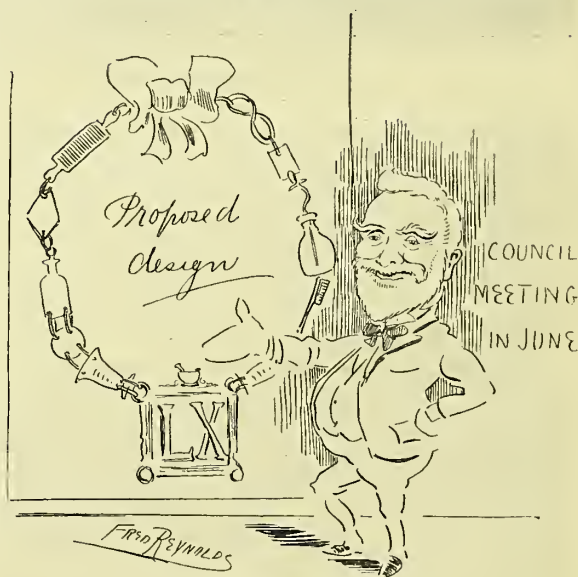
Alkaloids of Sanguinaria Canadensis.—Fischer, working in the Marburg laboratory, has just completed an exhaustive examination of the alkaloids of this drug. He gives a useful account (*Archiv der Pharmazie*, 1901, 409) of past work on the subject, especially of the most recent researches of König. It was the latter who first showed that the alkaloid which had been named "sanguinarine" by Dana, and shown to be identical with chelerythrine by Probst, was in reality a mixture of at least three bases. Of these, one is an alkaloid which yields red salts, for which the name "sanguinarine" is retained; the second yields yellow salts, and is termed chelerythrine; whilst the third appeared to be identical with Selle's homochelidonine. The formula advanced for the principle base—chelerythrine—by König was $C_{23}H_{25}NO_5$, and this is now confirmed by Fischer. By crystallisation from a solvent free from alcohol, he obtained it in colourless crystals, which melted at 263° (the alcohol crystallised form melts at 203°); and he also found traces of alcohol were given off when the crystals were heated and the vapours condensed. This at once indicates the presence of alcohol of crystallisation. The base crystallised from acetic ether agrees with the formula $C_{21}H_{17}NO_5$, and contains the equivalent of half a molecule of water of crystallisation. The analysis of salts of the base from which alcohol is naturally excluded confirms this formula, so that the two forms may be written $C_{23}H_{25}NO_5 + C_2H_5OH$, and $(C_{21}H_{17}NO_4)_2 + H_2O$. The formula advanced by König for

sanguinarine is confirmed—viz., $(C_{20}H_{15}NO_4) + C_2H_5OH$. The homochelidonine analysed by König gave results agreeing with the formula $C_{21}H_{21}NO_5$, but Fischer prefers $C_{21}H_{21}NO_5$. The analytical results do not differentiate with certainty between these two formulæ.

The Art of Pharmacy.



Expectation.



Realisation.

How was this absurd scheme of decorating the President hatched? Nobody seems to know. Mr. Atkins first alluded to it at the annual meeting of the Pharmaceutical Society in May, and Mr. Carteighe "drew attention to a very handsome design" of the badge after the public business was completed at the June Council meeting. But, so far as I know, neither the Society nor the Council has ever been even asked to approve of the idea.—["Xrayser," *C. & D.*, September 14.]

AN OLD STORY.—"The story of the son of the chief physician of the Grand Signior arriving at Vienna to study physic, and beginning his career with learning Latin, reminds us of the story of the Irish student of medicine, who applied to Dr. G—, at Edinburgh. 'I propose, sir, to write a history of physic from the commencement of the world.'—'Sir, you will do a laudable work; it is a *desideratum* in the medical world; you may begin with the Greek writers on the subject.'—'That is my intention, Doctor, can you recommend me a good Greek Grammar?'—*The Times*, September 26, 1801.

Observations and Reflections.

By XRAYSER.

A Revision of the Poisons Schedule

is certainly the most likely outcome of the Privy Council Committee, if anything results. That cannot be accomplished without a new Act of Parliament, for though the Pharmacy Act provides a means of adding to the schedule, it does not authorise any one to make even a verbal correction in it. It is this prospect of a Government Bill in regard to poisons which is the one hopeful legislative sign on the pharmaceutical horizon. I do not believe there is the remotest chance of any Pharmacy Bill which the trade may agree upon getting into, much less through, Parliament. But it might be possible to persuade the Privy Council to admit a clause or two into their Bill as supercargo. Consequently, we ought to be willing to stretch our complacency a long way in order to agree with Whitehall if we can. If the Privy Council try to reverse the principle of the Pharmacy Act, we can defeat them, as we have done before. But, short of that, it is to our interest to assist them in every possible way.

There are Anomalies

in the schedule, the most striking of which were pointed out in the editorial article last week. Some of these might be corrected with advantage. But it is notable how well, and with what little modification, the provisions of 1868, regulating the sale of poisons, have worked. The first schedule of poisons was affixed to a Bill which Lord Derby's Government introduced in 1857. That schedule as amended in 1858, when the Bill got through the House of Lords, is essentially the same as is now operative all over the British Empire. It has never been stated who first compiled that schedule. Whoever he was, he builded well. In the 1868 schedule only savin, ergot of rye, and belladonna were added to his list, while nux vomica, cocculus indicus, and salt of sorrel, which he had included, were omitted. Nux vomica has since been added. He only named "preparations" once; this was in connection with aconite. He prescribed "arsenic and its compounds"; in 1868 the last word was changed to "preparations."

The Legal Cases

reported last week are a little surprising. A Magistrates' court with Sir Edmund Fry, an ex-Lord Justice, in the chair is not likely to go wrong in law, but it is difficult to make out exactly wherein the Maidstone milk-dealers were in fault. It cannot be illegal for them to fix four-fifths of a gill as the quantity of milk they will sell for a penny; they had a measure made to hold that quantity, but they did not sell the milk as four-fifths of a gill, but as a pennyworth; the Inspector would not stamp such a measure; but the vendors are fined for using it. Is not the sale of "a shilling bottle of quinine tonic" or "a two-shilling bottle of eau de Cologne" equally illegal? The bottle is a measure, not an Imperial one, and not stamped. The "Pears' butter" case reminds us that there is no special protection in the Food and Drugs Act in regard to proprietary foods, though there is in respect of proprietary medicines. Also that a label, though it may distinctly notify the customer of an admixture, is not a sufficient protection to the vendor if a court holds that the mixture is in the nature of a fraud. But how a fraud can be compatible with a precise statement of what is sold I cannot realise.

The President of the British Association,

in the course of his defence of atoms, referred more than once to two recently

published works which he implied were to an extent antagonistic to his views of the constitution of matter. One of these was "The Riddle of the Universe," a translation of the last work of Ernst Haeckel, of Jena. I have just read this work. Haeckel has been a voluminous writer on biological subjects, but this is to be the last message from his physiological cells to ours. He is "a child of the nineteenth century"; he is 65 years of age, and does not expect to modify his views in any material respect; they are now mature, and about as complete as they need be. Haeckel is no agnostic; there is not much riddle in the universe to him; the nineteenth century, with Haeckel to help, has cleared up most of Nature's mysteries, and about the only trifle left for the twentieth century to explain is the real nature of matter. The doctrine of physiological cells, combined with Darwin's laws of evolution, have disposed of crazy superstitions about supernatural vital force, a Creator, and a separate soul. "The soul is a natural phenomenon." You have only, according to Haeckel, to postulate a cell formation of "psychoplasm," some of which differentiates itself into "neuroplasm," and the evolution of this natural phenomenon is simple.

Haeckel Becomes Humorous

in his chapters on the soul, which, though such a simple development, seems to need a lot of discussion. Old-fashioned ideas of immortality excite his neuroplasma most. On these he comes out with some lumbering jokes. How would you like to spend eternity with your mother-in-law? he asks; and how is Henry VIII. going to get along all that time with his six wives? But it is when Haeckel gets on to ether that he is immense. Of the existence of that material all through illimitable space there is, according to him, no doubt whatever. Of its exact nature there may be still some varying opinions; indeed, one theory requires one kind of ether and another needs a different article. But Haeckel supplies a formula which meets every case. Ether, he says, is a special structure not atomistic but "what may be called etheric or dynamic." It is not quite imponderable, but it is very light. A sphere of it the size of our globe would weigh only 250 lbs. Rubbish of this kind, mixed up with a great deal of real learning, constitutes the professor's last message to the world.

The other Book

referred to by Professor Rücker, who described it as "an attack of great power on many positions which eminent scientific men have occupied," is a work entitled "Naturalism and Agnosticism," by James Ward, D.Sc., Professor of Mental Philosophy and Logic at Cambridge, and is a healthy antidote to Haeckelism. Dr. Ward challenges the presumption of scientists who invent or adopt theories which they cannot prove, and then by their aid proceed to explain the universe by mechanical laws alone. He opens his attack by quoting the reply of Laplace to Napoleon. The astronomer was granted a personal interview with the First Consul in order that he might present him with a copy of his great work, the "Mécanique Celeste." "They tell me," said Napoleon, "that throughout this work you have made no mention of the Creator." "Sire," replied Laplace, "I had no need of any such hypothesis." Dr. Ward has no particular animosity against either atoms or ether, but he mercilessly criticises the unscientific assumption that a theory is absolutely true because it fits a few phenomena. We cannot know, for instance, when hydrogen came into the universe, but Clerk Maxwell asserts that "none of the processes of Nature since Nature began have produced the slightest difference in the properties of any molecule." Again, in regard to ether Lord Kelvin has written: "One thing we are sure of, and that is the reality and substantiality of the luminiferous ether." We are only sure of it because our present theory of light seems to call for it. Ether, Professor Tait says, "secures for us the idea of stuff or substance which the mind seems to require." There still remains the possibility that our powers of perception or of conception are not quite perfect.

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Editorial Comments.

Apprentices and Assistants.

THE correspondence on this subject which we have published during the past few weeks has demonstrated, if that had been necessary, the correctness of the statements which we made last month regarding the scarcity of apprentices, and the reasons for this scarcity. It is incontestable, on the evidence, that the numbers entering the trade are much below the normal requirements, while the numbers of those being registered as pharmaceutical students, or entering pharmacy with certificates which entitle them to registration, are ridiculously out of proportion to what they ought to be, or what has been. Leaving out of consideration the past two years, which have been somewhat abnormal owing to the rush of candidates for the old Preliminary examination, and taking the quinquennial period prior to 1899, we find that during the five years the number who passed the Preliminary examination was 3,449, while 613 were registered on other certificates, making a total of 4,062 registered as pharmaceutical students, or an average of 812 per annum. During the same period 2,499 candidates passed the Minor examination, or almost exactly 500 per annum. These numbers served to keep the register almost stationary. We have already mentioned (*C. & D.*, August 31, page 379) that this year only forty persons have registered as apprentices. The additional particulars which we have received from correspondents show that the proportion of qualified boys to unqualified who have commenced apprenticeship this year is as one to six, and less than half of the apprenticeship vacancies have been filled. The experience and statistics of previous years show that between 1,000 and 1,200 apprentices have been taken on yearly, and about 800 of these have passed the Preliminary examination. This year we calculate that between 350 and 400 have or will come into the trade, and of these fifty to sixty will register as pharmaceutical students. So far retailers alone have felt the pinch of scarcity in this matter of service, but ere long the diminution in the number of entrants will be seriously felt

by the Pharmaceutical Society, for, apart from the loss represented by examining nearly 2,000 Preliminary candidates yearly, the Society has actually lost touch with the youth of the trade through dropping the examination, and in a few years the number of candidates for the Minor examination will be greatly reduced. In 1900 the Society's income from 2,375 "First" examination candidates was 4,051*l.*, and from 1,949 Minors 7,823*l.* In future the former class will yield the bare registration-fees, and at the present rate these scarcely go into three figures. The most sanguine expectation cannot provide, a few years hence, more Minor candidates annually than 500 or 600 a year, say 400 at 10*l.* 10*s.* and 200 at 3*l.* 3*s.*, so that the preliminary registration and the qualifying-examination would on that basis yield a total income of 5,600*l.*, or about half of last year's income from these sources. This is rather a serious matter for the Society, but there is the other aspect of it, which is decidedly more serious to the drug-trade and pharmacy generally—viz, there is a real dearth of qualified men at present, and a threatened further diminution in the near future. How is the impending collapse to be averted? We mean the collapse of the whole edifice of registration which a couple of generations have been so laboriously preparing for and building up. Business must be carried on in some way or other, and if not by qualified men it will be carried on by those who are unqualified. There is ample evidence of this collapse. Schools of pharmacy have, we learn, fewer students this term than there have been for many years, and teachers appear to be agreed that the rosy times which they have had will not be seen again until a diminution happens in their number. Retailers know that qualified assistants are difficult to get, and public appointments are being filled by men who do not hold the Minor certificate. The Apothecaries' Society's Assistants' certificate has become so much a rival to the statutory qualification for pharmacists, and the conditions for obtaining the latter are now so onerous, that large trading companies are, we learn, beginning to recognise the Apothecaries' certificate as sufficient proof of competency for their dispensers. This is not the result of craze for cheapness, but is due to the difficulty of getting Minor men. It is perfectly obvious that the present regulations for qualification under the Pharmacy Act will not ameliorate these conditions. We submit that, apart altogether from the apprentice difficulty, which is urgent enough, the scarcity of qualified assistants is encouraging employers to ignore the statutory qualification provided by the Pharmacy Act, 1838, and this, added to the established practice of the Local Government Board of treating inferior qualifications equally with the Minor, is one of the gravest possible mischiefs. It is a matter that the Pharmaceutical Council alone can deal with, whereas the apprenticeship matter is largely one for chemists themselves. One of the first steps they should take has been hinted at by some of our correspondents, though in a rather gingerly fashion—they must prepare for shorter hours. The tendency of the times, in this country at all events, is for a greater amount of leisure, and no trade is more in need of increased leisure than that which employs chemists' assistants and apprentices. So far as apprentices are concerned there should be a time-limit beyond which no lad ought to be allowed to work. At present the hours are anything from 60 to 80 per week, sometimes more. There should be a fair average time fixed by every district for itself, and every hour on Sunday should be reckoned as two. If some such scheme as this could be adopted, and a weekly half-day off recognised, it would do much to smooth the path of possible entrants. Then there should be a return to the old plan of teaching apprentices the business of pharmacy. It will no longer do to make

porters or message-boys of them for a couple of years. If the trade is sufficient to keep an apprentice doing this class of work, it is sufficient to keep a boy for that work alone. Pharmacists are rapidly learning by experience that educated lads will no longer wheel a cart of siphons or carry a basket of aerated waters down the street, and the sooner they stop asking their apprentices to do this sort of thing the better will it be for all concerned. Again, apprentices must be better paid than they have hitherto been. A few select pharmacists may continue to demand and receive a premium, though our correspondents tell us that that system too is going by the board, but the general run of businesses must be content with something less ambitious.

The Camphor Monopoly.

THE arrangement between the Japanese Government and European financiers, whereby the latter, as a *quid pro quo*, have obtained the control of the camphor produced in Formosa, has now been sufficiently long in force to estimate the prospects of its success. The present is a peculiarly critical moment, because Japanese merchants who are not affected by the monopoly have recently been selling camphor produced in Japan below the monopoly-prices, and there is every indication that Japanese merchants are thoroughly alive to the advantage which the Formosan monopoly gives to Japanese camphor. It is, therefore, a matter of interest to watch the progress of the camphor industry in Formosa, and a timely article in a recent issue of the *Japan Weekly Mail* gives information, derived from official sources, in regard to camphor, camphor oil, salt, and opium, which are the subject of monopolies. It is, by the way, more than doubtful if these monopolies could be held to be valid under Japan's treaties with other nations, which prevent any special privilege being granted by Japan to any one nation. It is well known that the aboriginal or bandit disturbances in Formosa, not yet entirely abated, have considerably hampered camphor-production, and work has been entirely suspended in several districts during the current fiscal year; nevertheless, the total production of camphor has been above that of the preceding year. The amount of camphor sold since the establishment of the monopoly in July, 1900, to the end of March, 1901, was as follows:—

—	Class A		Class B		Total for both
	Amount in kin	Value in yen	Amount in kin	Value in yen	
July ...	185,000	176,415	144,700	122,995	330,400
August ...	5,000	4,740	301,500	256,275	306,500
Sept. ...	61,500	58,425	91,500	77,775	153,000
Oct. ...	87,500	83,125	215,000	182,750	302,500
Nov. ...	40,000	38,000	193,500	161,470	372,500
Dec. ...	75,000	71,250	297,500	252,875	—
Jan. ...	79,000	75,525	159,500	135,575	239,000
Feb. ...	120,000	114,000	175,100	148,855	295,100
March ...	353,600	335,920	1,059,400	934,490	1,453,000
Total...	1,007,600	957,410	2,677,700	2,276,015	3,685,500

(Kin = 132 lb. Yen = 2*s.* 0½*d.*)

The above table is a reprint from the *Mail*, but it obviously contains inaccuracies in the additions.

In addition to the above, in March last two other grades began to be produced, one by a process of drying and the other by pressure. The output of these grades has been:—

	Kin	Yen
Drying process ...	40,600	37,780
By pressure ...	105,069	13,112

The crude camphor in stock at the head monopoly office and its branches at the end of 1900 amounted to 300,000 kin. This, with the above-mentioned output, shows a total of 4,131,169 kin for the period extending from July, 1900, to the end of March last. But, besides the foregoing, the output of camphor oil during the period named amounted to 1,142,694 kin, this camphor oil being, we should say, the oil collected from the stills, which is essentially a saturated solution of camphor in the liquid volatile products, among which products is a constituent (at one time called camphorogenol) that yields by heating a further quantity of solid camphor, so that the camphor oil as it issues from the still contains about half its weight of camphor.

In November of last year the Japanese Government made an arrangement with special contractors in Japan for the purchase of all the raw camphor oil produced in Formosa, and a factory has been established in Kobe for treating this oil. Of this we gave particulars in our issue of June 22, page 1004. The arrangement between the Government and these contractors is that the latter return 45 kin of crude camphor for every 100 kin of oil received. This product has still to be reckoned with. The following table shows the value of the export of camphor from Formosa during the four years from 1897 to 1900:—

—	To Japan	To foreign countries	Total
	yen	yen	yen
1897	184,109	1,321,116	1,505,225
1898	334,830	1,661,945	1,996,775
1899	292,261	1,732,740	2,025,001
1900	1,000,938	1,385,645	2,386,583

The exports of camphor oil during the period were as follows:—

—	To foreign countries	To Japan	Total
	yen	yen	yen
1897	10,319	437,626	447,945
1898	2,679	540,919	543,628
1899	1,328	1,074,529	1,075,857
1900	—	907,089	907,089

It is apparent that the exports of camphor have been increasing, the first-quoted series of statistics, including the first quarter of the present year, confirming that conclusion in an extraordinary manner. As regards the working of the monopoly it is reported that the Formosan authorities have decided to adopt a new arrangement in the procedure of selling camphor to its sole agents Messrs. Samuel, Samuel & Co. Hitherto the price was proclaimed throughout the world, the Government being persuaded that this considerate measure would eventually tend to maintain a steady market. This open method of transaction is now considered to be "unbusinesslike, and to preclude the attempts at manipulation indispensable to any business"; so that the Government will, it is said, "keep secret in future the transactions between it and its sole agents, and, in general, conduct them in a businesslike manner." Probably so, but there is the fact to be reckoned with that the camphor produced in Japan itself does not come within the monopoly, and is not likely to, and is being sold for Europe in increasing quantities much below the monopoly-price. This is a most serious circumstance for the monopoly holders, and it remains to be seen what bearing the new secret arrangement has upon it.

British Inland Revenue.

THE report of the Board of Inland Revenue of the United Kingdom for the last financial year, which ended on March 31, 1901, comes to hand a week later than last year, probably because the departments had fully eight millions more income to deal with, for the net receipt of inland revenue duties was 93,176,187*l.*, as compared with 85,218,234*l.* in 1899-1900. There is no other country in the world which can show so striking taxation statistics as ours, for of the total only about a fourth (26,270,959*l.*) is derived from Customs taxation, and a half of the total is paid in direct taxation, with a consequent immense saving of intermediary trade profits, which would inevitably be exacted if a greater part of our taxation were placed upon usable commodities. Our inland revenue is an astonishing thing when looked at as the Board gives it to us in the aggregate figures for the past ten years. We cannot give all these, but the following will suffice to show how patient the British taxpayer is, as he has submitted to a 50-per-cent. import in ten years without much grumbling:—

—	1891-92	1895-96	1899-1900	1900-1901
	£	£	£	£
Excise ...	30,289,693	31,595,224	37,074,118	38,540,087
Stamps ...	5,448,334	7,339,231	8,429,471	7,886,857
Taxes—				
Land-tax ...	1,038,337	1,020,801	739,493	765,869
Inhabited house duty	1,442,848	1,486,948	1,698,523	1,701,085
Income-tax	13,853,016	15,982,844	18,867,326	27,561,160
Death-duties...	11,093,035	14,088,608	18,409,293	16,721,129
Total ...	£63,165,263	£71,513,656	£85,218,234	£93,176,187

There was a fall in the revenue in 1892-94, chiefly in Excise and death-duties. The spirit-duty was 11*s.* per gal. for a few years until 1893, when it was lowered to 10*s.* 6*d.*, then raised to 11*s.* last year. The beer-duty was raised to 6*s.* 9*d.* in 1894, and another shilling added last year, while the income-tax stood at 8*d.* until the Boer war made it 1*s.* The taxable income of the country has increased from 199,299,608*l.* in 1890-91 to 228,383,906*l.* in 1899-1900 (that is, under Schedule A), but public officials and officers of corporate bodies drew 70,093,523*l.*, and the grand total of income upon which the tax is paid in all schedules reaches the astounding figure, 788,023,603*l.* This is a topic for

moralists to dwell upon. We must give attention to those things which specially interest the drug-trade. In England there were 31,878 makers and vendors of patent medicines, and in Scotland 2,820, an increase of 82 in England and 62 in Scotland. Why this abnormal development in the North? They paid 8,672*l.* to the Revenue in licences. The stamp-duty paid on these medicines amounted to 297,480*l.* or 8,653*l.* more than the year before. We may recall the fact that 43,692*l.* was the net amount received from this tax in 1860, and in 1891-2 240,082*l.* It was less in the next four years, but reached 254,726*l.* in 1896-97, then 260,852*l.* in 1897-98, 266,404*l.* in 1898-99, and 288,827*l.* in 1899-1900. Last year's (1899-1900) revenue showed 84*l.* worth of medicines for each licence-holder, and this year's (1900-01) about 81*l.* worth.

The next items in the report which interest our readers are those enumerated in the side-title. In the year under review 20,124,003*l.* was paid as duty on home-made spirits, and the report gives full details as to the destination of the enormous volume of alcoholic liquors represented by that figure, particulars also

being given regarding beer, which paid 13,940,536% of duty. These, again, are matters for moralists, but we may say that 1 gal. of spirits is the consumption per head of population, besides 31 gals. of beer. Last week we quoted from the Government chemist's report some figures in respect to methylated spirit. Here they are given in proof gallons, the total for the year being 5,191,045. Of this spirit 123,332 gals. was foreign—the highest figure in that regard since 1894-95, when 447,949 gals. of foreign spirit was imported for methylation. After that a differential duty of 4d. per gal. was imposed. In England last year 4,449,546 gals. of spirit (including *all* the foreign) was methylated, in Scotland 692,486 gals., and in Ireland 49,013 gals. The makers in England have decreased from 26 in 1899-1900, to 23 in 1900-1; in Scotland they are still 2, and in Ireland 1. The retailing of methylated spirit appears to be becoming more popular, for 315 more licences were taken out in the year, the total now being 15,578—England 13,114, Scotland 1,703, and Ireland 758, the licence-duty paid being 7,664%. There are 543 distillers and rectifiers in this country, 1,339 sweets retailers, 10,590 retailers of wines not to be consumed on the premises, dealers in spirits 23,497, besides 121,533 retailers. We note that in 1893-94 there were in England 4,673 off-retailers of wine; now there are 6,750, and the larger part of that increase is doubtless owing to the so-called "medicated" wine trade. The use of stills is decreasing, the total for the year being 835, against 847 the year previous. Vinegar-makers have been reduced in England from 173 to 167, increased in Scotland from 3 to 10, and in Ireland from 5 to 7.

There is little else in the report of direct interest to us; but we may mention that alkali-works and the like decreased from 1,201 to 1,140 in 1900-1901, and 4,588 new companies registered paid the Revenue 761,974% on their capital, besides 73,152% for registration; while patents, designs, and trade-marks contributed 216,058% to the Revenue—a decrease of 654% on the preceding year.

INTER-STORES COMPETITION.

It is reported that Boots (Limited) are to open branches in Leeds, Halifax and Bradford, and are busy fitting up magnificent shops in these towns. There has hitherto been a friendly understanding between Boots (Limited) and Taylor's Drug Company (Limited) not to oppose each other in certain districts, but the period of this agreement has, it is stated, now terminated.

THE INDIAN MUSEUM.

The Economic and Art Section of the Indian Museum in Calcutta, of which Dr. George Watt is the officer in charge, contains a good many things which are of drug-trade interest, and we gather from the annual report, which has just been received, that it is capable of being made of greater usefulness to that section of commerce, for the Curator, Mr. David Hooper, is a pharmacist, and during the past year he has been provided with a chemical laboratory. Dr. Watt reports that Mr. Hooper has, at his request, devoted himself mainly to the examination of economic products newly received or taken from the collections in the museum, and of these ninety-seven have been examined, which is a decidedly good record. The following are the more important notes recorded in the report:—

The gum of *Acacia Senegal* from South Beluchistan was forwarded by the Political Agent, with the information that large supplies were available at certain seasons of the year. It has a good appearance, and forms a soluble and adhesive mucilage. The solution is not precipitated by acetate of lead or borax, but is gelatinised by ferric chloride. A regular supply of this excellent gum should find a ready and profitable market.

The gum of *Elaeodendron glaucum* is clear, brittle, light-coloured, and soluble in water, forming a good mucilage. The absence of much ash, and adhesiveness and reactions of the solutions are favourable qualities, and place it among the gums of the arabin class.

The cocoanut-palm affords at certain seasons an exudation of somewhat remarkable character. The gum is of rare occurrence, and belongs to the class known for their insolubility in water, although it may be dissolved in a boiling acidulated or alkaline solution. Another peculiarity of this secretion is the presence of salicylic acid, which is detected in its solutions, and may be separated by distillation with acid.

The *Butea frondosa*, or *Dhák* tree, yields a red, astringent gum known as Bengal kino. The exudations of this tree are, as a rule, nearly insoluble in water, but a specimen recently received from the Punjab was much more soluble in water than samples obtained from the bazaars and others which have been kept in the Museum for several years. The alteration of the tannic acid, which forms the principal ingredient in this drug, is doubtless responsible for the insoluble character of the older specimens.

One of the most interesting resins received in the laboratory during the year was a balsamic exudation named *Nantoyok*, obtained from *Altingia excelsa* growing in South Tenasserim, Burma. This fragrant resin is similar to the storax of the Levant, an article largely used in the East for perfumery and incense. The resin, separated from natural impurities, contained cinnamic acid, styrol and amorphous resins.

Among the medicinal substances received in the laboratory during the year were samples of coca leaves from Assam and South Wynaad. It was found that (1) the finer leaves of the coca-plant are richer in alkaloid than the coarse; (2) no advantage is gained by rolling the leaves before drying them. Simply drying the leaves in the shade is sufficient preparation for the market. Rolling breaks up the cells of the leaves and renders them hygroscopic in a damp atmosphere; and (3) coca-leaves rapidly deteriorate if kept for any length of time imperfectly packed or exposed to the air.

There are also excellent notes on tanning-materials and on tea-leaves and dust (caffeine yield, 2.9 and 3.3-4.48 per cent. respectively). The report shows the chemical possibilities to be so good that there will in future be no necessity for Dr. Watt to seek the assistance of the chemical department of the Imperial Institute, which is rather a roundabout way of getting information.

ANTI-PLUMBISM AND POTTERY MANUFACTURE.

A well-informed writer contributes a two-column article to the *Times* in which is discussed the impracticability of pottery manufacturers conforming to the Home Office regulations concerning lead-poisoning and carrying on business. The writer points out that lead-poisoning has rapidly diminished among potters and increased among other trades, as the following official statistics show:—

		Potters	Other Trades
1897	...	469	745
1898	...	463	951
1899	...	219	1,009
1900	...	200	1,057

The increase is marked in the trades of file-cutters, painters, sheet-lead workers, coach-painters, and paint and colour makers. The cases reported amongst potters for the six months (January-June) in the last four years show a decrease of from 226 in 1893 to 59 in 1901. This remarkable change, he admits, has been produced by the special rules introduced in 1898, and accepted by the manufacturers without demur, providing for the protection and inspection of lead-workers especially the women and young persons. But a crisis, the writer asserts, has been reached by reason of Rule 2, which enacts that:—

After July 1, 1902, no glaze shall be used which yields to a dilute solution of hydrochloric acid more than 2 per cent. of its dry weight of a soluble lead compound calculated as lead monoxide when determined in the manner described below.

By this rule, he maintains, the materials to be used by the manufacturer are prescribed for him, and he is tied down to

a chemical formula, an innovation of so sweeping and drastic a character as to have no parallel. The manufacturers (Minton's and Doulton's amongst others) point out that strict conformity to that rule is impracticable with the carrying on of business. The question concerns the glaze only used to make ware watertight or to face tiles. Since 1899 fritted lead has been used for these purposes, and Professor Thorpe's theory that if the ratio of the bases to the acids in a frit does not exceed 1.45 to 1, such a frit is practically insoluble, has been controverted by other authorities of greater experience, who contend that frits may conform exactly to this ratio and yet contain lead compounds which are soluble up to 100 per cent. But it is in the practical working of the proposed standard frits that the greatest trouble appears. Experience has shown that the percentage composition of finished glazes is fugitive, and cannot be relied upon. It is impossible, the writer asserts, to guarantee a standard composition, and the manufacturers, in view of these facts, are minded, if the rule is established, either to ignore it or close their works.

IS CUTTING ON THE WANE?

It really looks as if it were. Pioneers in that line of bad business are now most bitterly complaining about the competition that they have to meet, and are asking what good extreme cutting is to anybody, while firms who have for years protested that they cannot protect prices are now realising that it is to their interests so to do. The last to come into the fold is Bovril (Limited), who have fixed the prices of Bovril at—1 oz., 6½d.; 2 oz., 11½d.; 4 oz., 1s. 9d.; 8 oz., 2s. 11d.; and 1 lb., 4s. 10d. This gives a minimum of 15 per cent. profit on the outlay, and Bovril is henceforth to be supplied only on a written agreement that these prices will be maintained as minima. It is curious that this has been done at the request of grocers who began this cutting, but all round at present grocers are grumbling constantly about cutting, and are adopting agreements locally for maintaining prices of packed goods. This is a healthy sign, and we hope it will be kept up.

Gleanings from the B.A.

THE British Association meeting in Glasgow was concluded on September 17. It was not quite so successful as the previous meeting in Glasgow so far as numbers are concerned, but the interest and work were much better. The sectional addresses were as follows:—

Mathematical and Physical.—By Major P. A. MacMahon, D.Sc., F.R.S. On the position and progress of mathematics in this country.

Chemical.—By Prof. P. F. Frankland, F.R.S. Already dealt with.

Geological.—By John Horne, F.R.S. On recent advances in Scottish geology.

Zoological.—By Prof. J. Cossar Ewart, F.R.S. On the experimental study of variation.

Geographical.—By Hugh R. Mill, D.Sc. On researches in geographical science.

Economic Science and Statistics.—By Sir Robert Giffen, F.R.S. On the importance of general statistical ideas especially in relation to food supplies and population.

Mechanical Science.—By Col. R. E. Crompton. On traffic problems and locomotive vehicles.

Anthropological.—By Prof. D. J. Cunningham, F.R.S.—On the part which the human brain has played in the evolution of man.

Physiological.—By Prof. J. G. McKendrick, F.R.S. On the living cell and molecules therein.

Botanical.—By Prof. I. Bayley Balfour, F.R.S. On angiosperms.

Educational Science.—By Sir John Gorst. Already dealt with.

The whole of the addresses, including Professor Rucker's, are published in pamphlet form at 1s., and may be obtained from the offices of the Association, Burlington House, W.

THE CHEMICAL WORK

of the meeting was characteristic, the ionic hypothesis having an excellent share of attention. Professor Ramsay's lecture in St. Andrew's Hall on the inert constituents of the atmosphere was rather popular and practically what he has given elsewhere. It was illustrated with experiments and lantern-pictures.

Professor A. Michael, of Boston, U.S.A., contributed three papers, in the first of which he described the method of separating three forms of *cinnamic acid* by means of the barium salts, commented on the differences between them, and attacked van't Hoff's hypothesis. In the second, on *the genesis of matter*, he assumed that at the birth of matter there were two forms of "protyle" corpuscles endowed with opposite polarity, and only two forces—gravitation and chemical affinity—temperature being zero. In the third paper he suggested that *chemical substitution* may be regarded as a rearrangement of molecular groupings as the result of mutual affinity of elements.

Professor G. G. Henderson, D.Sc., and Mr. R. H. Corstorphine, B.Sc., gave a paper on *The Condensation of Benzil with Dibenzyl Ketone*, in presence of aqueous caustic potash, tetraphenylcyclopentenolone being produced. It occurs in colourless lustrous needles, melting-point 208° C., is readily soluble in benzene, but only sparingly in alcohol. It yields an oxime which crystallises in small colourless prisms, melting-point 167°, and when heated in alcoholic solution with parabromophenylhydrazine it gives a crystalline hydrazone, melting-point 169°. The other properties of the substance were fully described.

The ionic hypothesis or correlated subjects were also discussed by Professor James Walker, who spoke on *The Nomenclature of the Ions*. Dr. E. F. Armstrong discussed the *equilibrium law* as applied to salt-separation and the formation of oceanic salt deposits, exhibiting a model by the aid of which it is possible to forecast the order in which salts would separate on concentration from any given solution—*eg.*, sea-water, and also the relative amounts deposited at any stage. Dr. J. Gibson read a paper on *The Electrolytic Conductivity of Halogen Acid Solutions*, showing that there is a marked difference in the chemical behavior of the solutions of acids according as the concentrations are above or below the concentrations corresponding to their respective maximal specific conductivities. He has determined the conductivity of solutions of hydrobromic and hydriodic acids, and has found it possible to calculate the conductivity of the latter acid at high concentrations from data obtained. Dr. Farmer read a paper on "The Methods of Determining the Hydrolytic Dissociation of Salts," and another by Dr. T. S. Patterson, on "The Influence of Solvents on the Rotation of Optically Active Compounds."

The inevitable arsenic paper was provided by Mr. William Thomson, Manchester, on *The Detection and Estimation of Arsenic in Beer and Articles of Food*. It went over the old ground, and gave Mr. H. Stopes the opportunity of saying that people who do not understand malt-making should not talk about it, for, as a matter of fact, no good malt can be produced without the contact with the products of combustion in the final stages of drying. He asserted that by proper precautions malt can be made free from arsenic, and that arsenic is more to be feared in artificial preparations, which should not be permitted to be used.

One of the most striking features of the Section's proceedings was a discussion on *Chemical Education*, initiated by Professor J. Sakurai, of the Imperial University of Tokio, Japan. It was severely critical of modern methods. He said the mere learning of names, formula, preparations, and so forth, and the description of other isolated facts could not be regarded as a source of much mental satisfaction to the student capable of vigorous, or even moderate, exercise of the mind. They (teachers) were not making use of the keen educational implements they possessed to the best advantage, and in the interests of science and the profession this state of things should be speedily remedied. One of the remedies would, he thought, be to remove certain misconceptions which seemed to prevail very freely. They should get rid of the unfortunate name "physical chemistry." The name "physical chemistry" is unfortunate, as well as misleading, because, on account of the misconception, not only its cultivation, but also its teaching had been much

neglected. He suggested "general chemistry" to be used in its stead. In the classroom the attention of the student should be directed to points of general interest and importance, leaving the details to be acquired later. The time usually devoted to analytical work in the laboratory should be short.

Dr. W. A. Tilden was amused at the lecturer's denunciation of the term "physical chemistry," and said it was the fashion nowadays to denounce all the old teaching. Practically all the investigators who had enriched chemical science during the last forty years had been brought up in the old way. The method now adopted in colleges of hurrying forward students into research might be very interesting to them, but it made them lose a great deal of the technical skill which had been so valuable in the past.

Professor H. B. Dixon said in teaching even elementary-chemistry students he liked to teach from the historical point of view. He himself had been brought up in classics and mathematics, but he felt that he was getting "no forrarder," whereas whenever he touched chemistry he seemed to reach finality.

Professor W. J. Pope said it would be quite impossible to introduce physical chemistry into the laboratory to any great extent until the student had been two or three years engaged in the work.

Professor F. S. Kipping, Dr. George Young, Professor Divers, Dr. Hartog, and Dr. E. F. Armstrong (Berlin) also spoke, the general opinion being that qualitative and quantitative analyses still hold the field as the best initial training in chemical methods.

An exceedingly valuable report (third) on the *absorption spectra and chemical constitution of organic substances* was communicated by Professors Hartley, Japp, and Dobbie and Mr. A. Laurie. This contains, as an appendix, a list of substances, the absorption spectra of which have been studied in connection with their chemical constitution, with references to the original papers thereon. These include the following substances of pharmaceutical interest:—

Acetic acid	Cinchonine sulphate	Phenol
Aconitine (from aconitum napellus)	Cinchonidine sulphate	Picrotoxine
Aconitine (Japonic)	Codeine	Piperidine
Aconitine (pseud.) (from aconitum ferox)	Cotarnine hydrobromide	Quinidine sulphate
Aconitine (foreign)	Digitalin	Quinine
Ammonium hydroxide	Emodin	Quinine sulphate
Bruceine	Ethyl alcohol	Salicylic acid
Caffeine	Hydrocyanic acid	Salicin
Camphor	Morphine	Santaline
	apo-Morphine	Solanine
	Narceine	Strychnine
	Narcotine	Thebaine
	Nicotine	Thymol
		Veratrine

THE BOTANICAL SECTION.

Amongst the papers read was one on:—

"Preserving and Preparing Plants for Museum Purposes," by Mr. H. F. Tagg, describing the methods of preserving, bleaching, and mounting specimens for educational purposes. In a paper "On the Strength and Resistance to Pressure of Certain Seeds and Fruits," by Mr. G. F. Scott Elliot, it was reported that (amongst others) cardamom-seeds (native) stand a pressure of 7 lbs. without breaking, Calabar bean $43\frac{1}{2}$ lbs., and castor-oil seeds 17.84 lbs. on an average. Other seeds were mentioned, and the author said the resisting-power depends chiefly upon the shape of the seed and the character of the sclerenchymatous tissue. Many special peculiarities of fruits and seeds are important aids to their resisting-power. In particular, the ridges on the cremocarps of myrrhis and caraway, the peculiar three-cornered nut of beechmast, the spongy pericarp of trochæolum, very greatly diminish any danger of injury by pressure from above, as they yield to the pressure and do not break.

The other papers read to the Section are not suitable for abstracting.

THE GERMAN CHEMIST'S ASSISTANT who in Lausanne recently dispensed strychnine instead of santonin, thereby causing the death of a boy of 10 years old, has been fined 200f. and two-thirds of the costs of the trial, and the owner of the pharmacy was sentenced to pay a fine of 100f. and one-third of the costs. The assistant had previously paid the boy's parents 4,500f. as compensation.

Making Both Ends Meet.

Subjoined is the gist of a chemist and druggist's experience as a counter-prescriber. He begins the article with the question, Should a chemist prescribe? Our own opinion, based on experience, is that under normal conditions he should not go beyond the limits that the High Court judges in a famous case approved. The other view of the matter is told by "Vix."

THERE is nothing else for a chemist to do in a small business. He does not get the dispensing from the medical men, and when these gentlemen do send a customer to the chemist it is for Scott's emulsion or some such like proprietary article. I drew a prescribing business by billing my district with small bills, in which I plainly told the public that I was an experienced chemist, and could cure their ailments; and I paid a good deal of attention to my patients as they came. I append a few hints from my diary. A girl, about 15 years of age, was brought to me to treat. She had been under two or three medical men for a bad leg, broken out in several places. The sores had a healthy appearance. "Proud flesh" had been formed in them previously, and been continually treated with copper sulphate, putting the child to continuous pain, but for the past six months nothing but dressing with Condy's fluid had been adopted. Here I found the *C. & D.* book, "Diseases and Remedies," very useful. I instructed them to bandage the leg with ordinary bandage, dressing the wounds with ung. hyd. ox. rub. on lint, and as the girl appeared to suffer from anemia I gave this mixture:—

Syr. ferri iodid. ... 3iv.
Aq ad ... 3viij.

M. 3ss. t.d.s.

This mixture also induced regularity. In six weeks the leg was completely healed.

In skin-diseases I have used with excellent success Donovan's solution. For obstinate spots and blackheads, on the face especially, this mixture has proved good:—

Liq. Donovan. ... 3ij.
Inf. gent. ad ... 3viij.

3ss. t.d.s. p.c.

In cases of young men so troubled, a good remedy is—

Magnes. sulph. ... 3j.
Liq. arsenicalis ... 3j.
Dec. sarsæ co. conc. ... 3j.
Aq. ad. ... 3viij.

M.

3j. t.d.s. p.c.

Some time ago I analysed a mixture for fits in young people, which is very much advertised. A customer of mine sent for a bottle, for which she paid 10s. 6d. According to the patient's opinion it worked wonders. I made up a similar mixture, based upon the result of my analysis, and it proved to be just as miraculous. This is the mixture I made:—

Ammon. brom. ... 3v.
Ol. gaulther. ... 3ix.
Spt. vin. rect. ... 3ij.
Inf. quassia ... } q.s. to taste
Tr. croci ... } and colour

M.

Sig.: 3i. ter die et horâ somni sumenda.

A few bottles effected a cure where pot. brom. had been taken for months before trying this.

VETERINARY DISPENSARIES.—Some eighteen months ago the Madras Government sanctioned the establishment of six veterinary dispensaries whenever funds for that purpose might be available and when trained veterinary graduates could be obtained on a salary of 20r. per month, rising by annual increments to 50r. The Trichinopoly District Board have been the first to take up the matter by opening a dispensary. The scheme has for its object the diffusion of a knowledge of veterinary science among the ryot class, and to effect this and gain the confidence of agriculturists it is proposed to treat animals free of charge, with medicines at cost-price, for some years at least. Two other districts are likely to take action in a similar direction.

American Medicine-men.

WE do not refer in this title to those dignified and weird gentlemen whom Fenimore Cooper has immortalised, but to those moderns who have made their "little pile" by advertising methods. We have spent a pleasant hour in reading recent issues of *Printers' Ink*, and the gist of our reading is included herein.

The Penn Drug Company, of Oshkosh, Wis., are the owners of a medical formula which has been handed down in the family of the president of the company through generations from Dr. Calvin Crane, an eminent Quaker physician and scientist. Its curative power was exerted in liver troubles, kidney diseases, stomach disorders, indigestion, constipation and kindred ailments, and in these latter days it has been converted into a chocolate-covered tablet, the company exploiting it as the Quaker Tonic, and soliciting people to take 100,000 \$1 shares at 20c. a piece. To draw them, a clever prospectus was written by an Oshkosh young man, who, amongst other allurements, recited the following "facts." Oshkosh, we may incidentally remark, is the place where mules stand on their heads when not working. So Max Adler says.

No argument is needed to convince people that there's money in the patent-medicine business.

The Sterling Remedy Company, of Attica, Ind., owners of "Cascarets," count their profits in millions.

The Peruna Medicine Company, of Columbus, O., ship an average of five carloads of its liquid remedy every day. One carload of Quaker Tonic would net a profit of about \$15,000.

F. A. Stuart, of Marshall, Mich., was backed by his friends to the extent of \$20,000 when he commenced advertising his dyspepsia tablet. Just as the last dollar of that fund was spent his ship came in on a tidal wave of wealth.

Professor Munyon's remedies were started but a few years ago; last year Mr. Munyon invested a quarter of a million dollars in Philadelphia real estate, and gave \$2,000,000 to the same city for an orphan asylum.

The two sons of Mrs. Ayer are said to get \$1,000,000 a year each as their share of the profits on Ayer's sarsaparilla and pills.

The owners of Swamp root, which is made at Binghamton, N.Y., give away half a million dollars in charity every year.

Carter's Little Liver Pills opened the door of the millionaire's club for Mr. Brent Good.

The Lydia Pinkham Compound has made all of its owners rich beyond the dreams of avarice.

The Dr. Shoop Medicine Company, of Racine, Wis., has filled its stockholders' pockets with gold. Post-office records show that Dr. Shoop paid the Racine postmaster over \$187,000 last year for 1c. postage-stamps.

Omega Oil, owned by New York capitalists, is less than three years old, yet the company will spend \$450,000 of its earnings in advertising this year.

Ten years ago Senator Fulford was introducing pink pills in Canada. Mr. W. T. Hansom, of Schenectady, New York, paid him \$100,000 for one-half interest in the United States business, and to-day their growing wealth is manifested in their benefactions.

Mr. Brent Good's history is told in the same number by advertising-agents who have street-car advertising-space to sell. Mr. Good was born in Rochester, N.Y., in 1837, and was taken by his parents to Canada, and reared on a farm located near the Bay of Quinte, Ont. His school life was followed by an apprenticeship to the drug-business at Belleville, Ont. Towards the end of 1855 he made his way to New York, and obtained a position with Demas Barnes & Co., large handlers of proprietary medicines, and in 1863 he was taken into the firm. In 1869 the partnership was dissolved by the selling of the stock and goodwill to John T. Henry & Co., and Mr. Good became a member of the firm of Good, Roof & Co., for the purpose of importing wines. In 1878 he purchased an interest in the little liver pill made by Dr. Carter, of Erie, Pa., who was at that time doing a business of \$10,000 a year with it. Mr. Good formed the Carter Medicine Company, and in 1886 brought the pill to London. We know the rest, but the moral is that Mr. Brent Good is a believer in street-car advertising.

It seems to be as great a thing in U.S.A. to be amongst the largest advertisers as it is in the prosaic East to be a member of the aristocracy. It is agreed that the largest advertising there is that of the patent-medicine houses. There are three advertisers present everywhere spending a million

dollars yearly—Pernna, Pinkham, and Paine's Celery Compound. Hood's, Ayer's, Omega Oil, Swamp Root, Pierce, StUART, Dr. Kennedy, Dr. Miles, Dr. Greene's Nervina, Carter's Little Liver Pills, Ripans, Castoria, and dozens of others take a back seat. An association has been formed in Chicago called the American Society of National Advertisers, to which only men spending at least \$50,000 annually are admitted and only one man in each business. The object is said to be to discuss secretly matters of interest to large advertisers, and to let the combined wisdom and knowledge of the society bear upon the various intricacies that the individual members may encounter.

Mr. E. S. Wells, formerly pharmacist in Jersey City, N.J., and maker of "Rough on Rats," and other "Rough ons" (that is how they put it), has been telling the story of his career to the little schoolmaster. In brief it is this:—

Born near Morgantown, W. Va., in 1841. At 12 entered a drug store in Uniontown, Pa. When 18 went to New York with \$1.25. Got into a small retail drug-store in Chambers Street at \$2.50 a week, with privilege of sleeping on the floor. Boss (Dr. Cochrane, a good-hearted Scotchman) failed. E. S. W. next went as a drug-clerk to Dowagiac, Mich., at \$125 a year. There developed the advertising fever, but he had not got far with it when the war broke out, and in 1862 he went into the army. Was quickly invalided, and obtained a drug clerkship in Jersey City. In three months bought the store—"on time." Soon got a second store going, and by 1867 had accumulated about \$30,000. Then came a reaction, and from 1872 to 1881 he had spent all in advertising—and was \$30,000 in debt! Between these years "Rough on Rats" had been brought out, and advertised with other things to the amount of \$18,000 a year. In 1880 his goods were selling well, but he had got down so low and so far behind that he was practically bankrupt, and Mrs. Wells and he gave up their church pew partly to save the money and partly because they were so shabbily clothed that they were ashamed to go to church. Early in 1881 there came a turn to their affairs. Mrs. Wells one Monday morning told him that there was a big mail, and amongst it letters from wholesale druggists. These contained orders for \$900 worth of goods, but Wells had not the goods to fill the orders, and went into New York to borrow some money. This he could not get, and compromised by placing orders with advertising firms for \$18,000 worth of advertising, to run for four months before the first month's was paid. Then he went to a drug house and got what he wanted without much question. He executed the orders, and things had a good start. He told all his agencies that he had placed \$18,000 worth of advertising, and that they should look out for orders and be prepared to execute them, and that he could not send out on sale or return any longer. The money began to pour into him, and by 1882 he had paid all his debts, cleared expenses, and was \$60,000 to the good. "And darned if I did not go to Europe that year," said Mr. Wells, finishing up this part of his narrative. The rest of the interview was about the discovery of the poison. When he got it and proved its excellence he did not care to call it rat "killer" or "exterminator," these names being too common, and one night, in working over it far into the morning, he got up tired, saying aloud to himself, "Well, whatever I call it, in the end it certainly is rough on rats." There he had the name.

It is reported that Mother Seigel is to renew her youth in the land of her birth. The syrup is known out there as "Shaker Extract of Roots," and has been kept before the public in a half-hearted sort of way for many years, but advertising on a large scale is expected this fall. American shareholders of A. J. White (Limited), 168 Duane Street, New York, are to look after it.

New Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Baker, A. *How to Paint Photographs: in Oil and Water-colours.* 12mo. 1s. (Winsor.)

Halliburton, W. D. *Handbook of Physiology.* 4th edition. 8vo. Pp. 908. 14s. (Murray.)

Marriage, Ernest. *Elementary Telephotography.* Large 8vo Pp. 118. 3s. 6d. net. (Iliffe & Sons, Limited.)

Penn, W. A. *Sovereign Herbs: a History of Tobacco.* Illus. by W. Hartley. 8vo. Pp. 336. 6s. (Richards.)

Taylor, F. *A Manual of the Practice of Medicine.* 6th edition. 8vo. Pp. 1,044. 16s. (Churchill.)

Legal Reports.

High Court Case.

BEECHAM'S PILLS.

IN the Vacation Court, on September 25, before the Lord Chief Justice, application was heard on behalf of Mr. Thomas Beecham for an injunction to restrain Mr. Cooper, chemist, West Smethwick, Birmingham, from selling as Beecham's pills, pills not of the plaintiff's manufacture. It was stated that the defendant was now prepared to consent to a perpetual injunction in the terms of the notice of motion, and to pay 40*l.* in respect of damages and costs. His Lordship made an order accordingly.

City of London Court.

WILSON'S FOOD.

ON Wednesday, September 25, Assistant-Registrar Tattershall heard further evidence in the case of *Greenberg v. Hampton (C. & D., September 14, page 473)*. The action was brought by Mrs. Emily Greenberg, trading as Wilson's Food Company, to recover 4*l.* 12*s.* from Mr. William Hampton, grocer, 5 Bouverie Street, Paddington, for Wilson's Food supplied. The defence was that the plaintiff's representative promised that goods of a similar description should not be sold within a radius of one mile, and this had not been fulfilled. The case was postponed to hear evidence on this point from Mr. Hampton. It was also alleged that the goods were in a disgraceful state. The Assistant-Registrar, after hearing the evidence, said the defendant had only himself to blame for taking in damaged goods, if they were so. The defendant had paid the carrier, and that fact had put him out of court. At any rate, he must pay the plaintiff's claim. If he wished, the defendant might bring an action for damages for breach of contract with regard to not having the sole agency for the sale of the food in his district.

RESPONSIBILITY FOR REPRESENTATIVES.

IN the case of *Barnes v. Wright*, which came before the Deputy-Judge of the Court (Mr. Pitt-Lewis, K.C.), on September 25, the defendants, who carry on business in Clerkenwell, had a branch establishment at Manchester, in charge of one Butterworth, who had their authority to act as their representative, they paying half the rent of the office, it being his duty to get orders for them, on which he was paid a commission of 5 per cent. Butterworth gave an order to the plaintiffs, a City firm, for 15*l.* worth of goods, and they now sued his employers, who repudiated their liability, because the goods were never received by them. Mr. Frampton, who appeared for the plaintiffs, argued that a representative had authority to bind his principals. Mr. Hawtin, counsel for the defendants, said that if such a decision were given it would be most disastrous to trade. A representative had authority to take orders, but he had no business to give them. If employers were to be held liable for all goods that a representative cared to order they would soon be ruined. The Deputy-Judge said he quite realised that, and the Courts had never decided whether or not a man who was a representative had authority to buy goods and bind his employers to pay. He held that a representative was authorised not merely to take orders, but to give them, and to act with general authority. Instead of employers supplying men with cards, as the defendants and many other commercial firms did, stating that the bearer was the "representative" of the firm, they should state that the card was "presented by," which would make all the difference. There had been a holding out of authority on the part of the defendants. Judgment was accordingly given for the plaintiffs with costs. Mr. Hawtin said that the case was so important the defendants must appeal.

MUNICIPAL TOXICOLOGY.—Councillor: "Gentlemen, we must have two reservoirs and a under-cover; for consider, gentlemen, the awful effect if some hevil-disposed person was to throw a little bottle of *puaid* acid into one of them."

Bankruptcies and Failures.

Re SAMUEL TURVEY, Bilston, Chemist and Druggist.—Debtor appeared for his adjourned public examination at Wolverhampton Bankruptcy Court on September 18, and after having signed the notes of his previous examination he was allowed to pass.

Re GEO. B. TOWLER, Wolverhampton Road, Heath Town, trading as a Chemist and Druggist.—A petition in bankruptcy has been filed against the above, whose whereabouts, it is stated, are unknown.

Re J. E. LYNDALL, 169 Ashley Gardens, Westminster, late Managing Director of Myname Soap Company (in liquidation).—Upon the application of Mr. Thos. Edwards, acting on behalf of the London Corporation (Limited), creditors for 170*l.*, a receiving-order was made against this debtor. No particulars transpired with regard to assets or liabilities.

Re M. L. BAUER (trading as M. L. Bauer & Co.), 11 and 12 Great Tower Street, E.C., Drug and Spice Merchant.

AT the London Court of Bankruptcy on September 24, before Mr. Registrar Linklater, a sitting was held for public examination. The debtor stated in reply to the Senior Official Receiver that he had previously failed in 1879 and again in 1894. Under the 1879 failure he was involved to the extent of 100,000*l.* in accommodation bills, which he had accepted on behalf of two firms of South African merchants. A composition of 4*s.* 3*d.* in the pound was paid on those liabilities, the other creditors being paid in full. He believed that under the 1894 failure his creditors received nothing. He considered that his present failure was mainly due to the insufficiency of his capital and general decline in business. It was his practice to buy goods he did not intend to take up, but to re-sell at a profit when the market rose. In that way during the past eighteen months he incurred losses of about 2,000*l.* on deals in shellac and quinine. He estimated that his household and personal expenditure during the last three years had been at the rate of 800*l.* or 900*l.* per annum. He had a wife and four grown up daughters, and found it impossible to live on less. The examination was concluded.

Re AUGUST ANHOLME, 37 Dock Street, Hull, Surgical-instrument and Drug Dealer.

A MEETING of the creditors was held on September 24, at the offices of the Official Receiver, Hull. It appeared from the report and observations of the Official Receiver that the debtor filed his own petition. He commenced business as a surgical-instrument and drug dealer in 1881, without any capital of his own. His turnover amounted to about 200*l.* per annum, and his profits to 85*l.* per annum, which he spent in household and personal expenses. The statement of affairs filed by the debtor disclosed gross liabilities amounting to 1,031*l.* 17*s.* 3*d.*, of which 833*l.* 10*s.* 2*d.* was expected to rank against the estate for dividend. The present difficulties arose from his connection with the estate of the late Mr. Chappell, of the Manchester Hotel, of which he was sole executor. The Official Receiver said it was a somewhat singular case, and would be fully investigated. Eventually the estate was left in the hands of the Official Receiver for summary administration in the usual manner.

Gazette.

Partnerships Dissolved.

Charnley, J. L., and Harwood, W., under the style of Charnley & Harwood, Blackburn, soap-manufacturers.

Cook, C. and F., under the style of R. H. N. Cook, Newcastle-upon-Tyne, oil merchants and paint manufacturers.

Morgan, E. C., and Dennes, H. M., under the style of Morgan & Kidd, Argentic Works, Kew Foot Road, Richmond, S.W., manufacturers of photographic papers, dry plates, &c.

Russell, William, and Paine, Edward S., trading as the Thistle Chemical Company, at Thistle Chemical-works, Glenpark Road East, Glasgow. Debts by E. S. Paine, who continues.

The Bankruptcy Acts, 1883 and 1890.

ADJUDICATION.

Parkins, Thomas, Salford, Lancs, chemist and druggist.

Deed of Arrangement.

Norcombe, James Edward (trading as the Edgbaston Mineral Water Company), 86 and 87 Bishopsgate Street, Birmingham, and residing at 40 Duchess Road, Edgbaston, Birmingham, mineral-water manufacturer. Trustee, Charles F. B. Flint, 135 Colmore Row, Birmingham, Chartered Accountant. Dated, September 16; filed, September 19. Liabilities unsecured, 1,472*l.* 14*s.* 3*d.*; estimated net assets, 255*l.* 14*s.* 8*d.* The following are amongst the creditors:—

	£	s.	d.
Bratby & Hinchliffe, Manchester	15	0	0
Clayton & Jowett (Limited), Liverpool	31	0	0
Chuit Naef & Co., Geneva	12	0	0
Duckworth & Co., Manchester	22	0	0
Deakin, J. D., Birmingham	20	0	0
Harrison, A. (Limited), Liverpool	10	0	0
Hay, William (Limited), Hull	13	0	0
Kilner Brothers, Conisboro'	186	0	0
Lumb & Co., Castleford	53	0	0
Meadowcrofts (Limited), Blackburn	79	0	0
Norcombe, Wm. H., Birmingham	889	3	0
Symington & Co., Glasgow	10	0	0

New Companies & Company News.

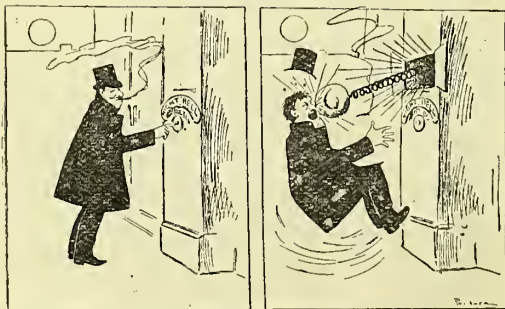
BRITISH CARBURIZING COMPANY (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To acquire and turn to account any inventions for case hardening iron, steel, and other metals, in particular to acquire the benefit of certain existing inventions from H. van Vught, and to carry on the business of chemists, druggists, dry-salters, &c.

LUSBY & CO. (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire from Lusby (Limited) the business of tobacco and cigar importers, manufacturers and merchants and dealers in smokers' requisites carried on by them, and to carry on the same and the business of dealers in pinosza specialties, soaps, perfumery, medical, surgical, and toilet requisites, tea, coffee, cocoa, and alcoholic or other beverages, &c. No initial public issue. The first directors are: C. Joseph, A. Joseph, and A. C. Jarvis. Qualification 100*l.* Remuneration 50*l.* each per annum.

HARVEY & CO. (DUBLIN) (LIMITED).—Capital [nominal] 5,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of veterinary chemists and manufacturers of and dealers in "Harvey's Great Remedies for the Horse," carried on by J. De la Cour Bogue at 49 Lower Gardiner Street, Dublin, under the style of "Harvey & Co." The first subscribers are:—Mrs. E. G. Bogue, 5 Kenilworth Square, Dublin; J. De la Cour Bogue, 49 Lower Gardiner Street, Dublin, merchant; Miss E. C. Bogue, 5 Kenilworth Square, Dublin; W. B. Scott, 55 Dawson Street, Dublin, solicitor; M. Mangan, 55 Dawson Street, Dublin, gentleman; P. Bogue, 6 Bachelor's Walk, Dublin, gentleman; and P. G. Holloway, 7 Rogerson's Quay, Dublin, naval architect. Registered without articles of association. Registered office, 49 Lower Gardiner Street, Dublin. [This company has been formed to facilitate family arrangements.—EDITOR.]

JULES VIGO ET CIE. (LIMITED).—It was resolved on August 26 and confirmed on September 12 that this company be wound up. The liquidator is Mr. A. H. Caesar, 85 Gresham Street, E.C.

The Night Bell.



This view of it is not suggested by the sketch published in the *C. & D.* of September 21, but is reproduced from the *American Druggist* of an anterior date.

Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1*l.*, obtainable through any money-order office.

(From the "Trade-marks Journal," September 18, 1901.)

Device of T, and the word "Thume" (the essential particular); for goods in Class 3. By Jean Bardin, 40 Rue de l'Ecuyer, Brussels. 239,982.

"TACQUARA"; for a medicine. By F. C. Poisson, Bartholomew House, Bartholomew Lane, E.C.; W. N. Turvey, Amberley House, Norfolk Street, Strand, W.C.; and W. J. Woods, 39 Lime Street, E.C. 240,085.

"KORA"; for cameras. By S. Goldman, 87 Fordwych Road, West Hampstead, N.W. 239,373.

Circular device and the word "ROTAREA"; for an inhaler. By R. E. Conlin, 233 Main Street, Poughkeepsie, New York State, U.S.A. 235,165.

"CELTEX"; for surgical-instruments, apparatus, and contrivances. By Southall, Brothers & Barclay (Limited), Birmingham. 239,899.

Combination of devices (the essential particular), being eagle resting on a copper labelled "Ordinary Commercial Oil," and holding in beak a smaller copper labelled "Terpeneless"; for terpeneless oils. By Fratelli de Pasquale & Co., Largo Munizione, Messina. 238,746.

"HATALINE"; (no claim for "Hat"); for a silk-hat renovator. By C. W. S. Blyton, 18 Appach Road, Brixton, S.W. 234,877.

Design of crossed halberds and Chinese characters meaning "Halberd"; for soap, detergents, perfumery, and toilet articles. By J. Crosfield & Sons (Limited), Bank Quay, Warrington. 238,576 and 238,577.

Circular device enclosing two pears; for candles, soaps, detergents, oils, &c., and perfumery and toilet articles. By A. & F. Pears (Limited), 71/75 New Oxford Street, W. 240,170 and 240,171.

"MUNJINA" (the essential particular); for a tooth-powder. By Mary Place, 94 Radcliffe Gardens, South Kensington, S.W. 239,788.

(From the "Trade-marks Journal," September 25, 1901.)

"ISOLAR"; for photographic chemicals. By the Actien-Gesellschaft für Anilin-Fabrikation an der Treptower Brücke, Berlin. 238,447.

"FOR"; for goods in Classes 1 and 8. By R. and J. Beck (Limited), 68 Cornhill, E.C. 240,362 and 240,363.

"TIMMISONE"; for an embrocation. By the Timmison Company, 7 Grange Road, Sheffield. 239,735.

Picture of marshmallow-plant and the word "Malloween" (no claim for "Mallow"); for a skin preparation, perfumery, and toilet-articles. By H. Dawson & Co., 34 Norfolk Street, Strand, W.C. 239,750 and 239,751.

"SOLENE"; for chemicals. By Rosa Griffin, 7 Mandeville Place, Portman Square, W. 239,773.

"THROATLETS" (no claim for "Throat"); for articles in Class 3. By W. A. Jones, Sand Lea, Grange Road, West Kirby, Cheshire. 240,313.

"PURITAN"; for marking-ink. By Southall Brothers & Barclay (Limited), Lower Priory, Birmingham. 240,375.

"ZANOL"; for tooth-powder, tooth-paste, and tooth-washes. By H. Hülsebusch, 35 Hohenzollernring, Cologne, Germany. 238,909.

"UZON"; for toilet-preparations. By Edwards' "Harlene" Company, 95 and 96 High Holborn, W.C. 239,424.

"SAPOPHENE" (no claim for "Sapo"); for perfumery and toilet-articles. By R. Hovenden & Sons (Limited), Berners Street, W. 239,838.

Sketch of a crab and sketch of a lobster; for perfumery and toilet-articles. By J. Crosfield & Sons (Limited), Bank Quay, Warrington. 240,210 and 240,212.

"RUBSTITUTE"; for powder, paste, liquid, paper and cloth polishes. By Kay Brothers (Limited), Stockport. 240,452.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Apprentices and the Preliminary Examination.

SIR,—A year ago I was wanting an apprentice; I advertised and had several replies, but most of them were youngsters of such a class as would be more suitable for errand boys. Their parents were astounded when told what they would have to go through to make chemists. One or two others who were of a better class did not like the long hours. Not enough recreation and not enough prospects of good pay. None of them had passed any preliminary examination. One only who had passed was a country clergyman's son. I partly made arrangements with him, when his mother said she hoped he would not have any *menial* work to do, such as sweeping up or dusting. Of course that was no good to me, so I broke off negotiations. Since then I have had perforce to take a young relation who, though a bright lad, has not passed any examination, and I fear with having to study during work hours (he goes to a school for two and a half hours each morning) he will have a great difficulty in managing the present Preliminary. I know several chemists here have difficulty in obtaining apprentices even though they offer to give 13% first year, without premium, increasing by 2% 12s. yearly for three more years. Boys who have passed equivalent examinations prefer to go into the civil service, banks or other offices where they can have shorter hours, cleaner work and prospect of good salaries, without having to spend from 50% to 250% in studying for exams. So we have to be content to take those who have passed nothing, or do without. Your correspondent J. S. W. says we shall, or should, according to his programme, put into the market a supply of reliable men who will command, say, 200% a year which is not too much. As regards the men themselves they would not think it too much; but what about a proprietor who requires an assistant of some kind? I fear 200% a year is rather too much for him to pay out of his profits. Any way there are hundreds of men like myself who, though doing just a little more than they can cope with alone, could never afford out of that little to pay such "reliable men." So we are obliged to fall back upon trying to obtain apprentices, even though they have passed no examination, much though we regret it, and none do so more than I, because I can plainly see that unwillingly we must inevitably swell the ranks of the unqualified "opposition." As to training apprentices thoroughly, who, nowadays, can do so? In these times of cutting, we cannot afford to make any preparations beyond perhaps a few ointments; and even "our own" proprietaries are put up for us by wholesalers. The present day apprenticeship system is bad, unqualified apprenticeship is worse, but "times is wussert" so what's a man to do?

Yours faithfully,

"BOGIE." (7/26.)

SIR,—My experience in this matter may be interesting. During my seventeen years in business I have had several apprentices, none of whom had passed the examination. I have given them a wage, short hours, and a generous allowance of time for study, but have always found that much of this time was used for quite other purposes, and that the lads made little advance towards passing. I then determined not to take another until he had shown an aptitude for serious study by first passing the examination. On advertising I had a reply from one who had passed the last of the Preliminary examinations. The father was a well-to-do mill-marguer, and the lad was smart and intelligent-looking, and I congratulated myself on having met with one so suitable. My terms, I think, were generous: no premium, a fair and increasing wage for the four years, hours 8 to 8, and time for study and recreation equal to about two days

per week. But the father had exaggerated ideas as to his son's abilities, the work that he should do, and the remuneration that he should have, and the negotiations fell through. He thought that he could get better terms, and whether he did so or not I do not know. The fact is that lads cannot now live without football and other sports, nor reconcile themselves to working later than 5 or 6 P.M. and 12 noon on Saturdays. In my opinion the Preliminary examination was ample for its purpose, but it should be made compulsory before the age of 18. The proper business of the Pharmaceutical Society is to fit a man to be a retail chemist and druggist; if it attempts anything more ambitious it goes beyond its legitimate, if not its legal, functions.

Yours truly,

Oldham, September 21.

JAMES LEES.

SIR,—I am glad to see that chemists are taking this matter up, as it is a most important one, and the future of our retail-trade depends upon it. What will become of the trade if we cannot get apprentices? Look at the trade itself. It means that the apprentice has to open the shop at 8 o'clock in the morning, and stop there until 9 o'clock at night. He has to pass a Preliminary examination, including French and Latin, to be able to sell a few drugs and to be able to mix up paints, &c. As for prescriptions, many chemists very seldom see one, as most of the doctors now make up their own medicines. The shop hours that the apprentice and assistant have to put in are very long, and when an apprentice is out of his time he gets the large wage of about 25s. to 30s. a week outdoor, and not very much more if qualified. I think it is time the Pharmaceutical Society took this matter up, and when they can get a Bill passed stopping company pharmacy, and requiring every man to be in his own shop, I think we will get apprentices, but not before.

Yours truly,

Leeds, September 21.

A. H. JONES.

SIR,—I am very glad indeed you have taken up the question of the Preliminary examination as it affects the obtaining of apprentices. My last apprentice left me a few months ago, without a moment's notice, after failing twice in the Prelim. last year. I had no chance of getting another to try under the old regulations. Since then I have had four or five boys, not apprentice. I advertised, and wrote to a few of the most likely schools, asking the masters to recommend me a suitable boy as apprentices. I enclose their replies. In my last advertisement I stated that I would take a boy or girl, and received six replies—two from boys, the rest from girls. I found that the girls were not prepared to do such work as cleaning windows. I now have a boy whose schoolmaster told me had no brains; nevertheless, he is very smart in the shop. There is no prospect of him ever passing the Preliminary examination. I am afraid, unless things are altered, this is the sort of boy we chemists will have to get. Hoping some good will come of the correspondence which you initiated,

Sincerely yours,

FORFARSHIRE. (62/22)

The following are the letters referred to. The writers of the first and second are graduates in arts:—

"I really find it impossible to get an apprentice boy, and, in fact, a good girl would not go in unless she was sure to get through the examinations."

"Sorry I cannot recommend an apprentice. The rise in the standard for Prelim. exam. will ultimately improve your business, I believe, but in the meantime it diminishes the number of candidates for places in chemists' shops."

"Although the notice for a chemist's apprentice has been displayed in our lobby for a week, and although hundreds of students have been enrolled this week, no application has been made to me."

I have been trying for eighteen months to get an apprentice. Have had three applications; none have passed a qualifying examination. One said his father did not object to his being an indoor-apprentice, but could pay no premium, and the youth wished to know "how much pocket-money was allowed each week." The appearance of the others was not favourable as indoor-apprentices. (Yorkshire, 9/3)

I have taken one apprentice lately, who has not passed Prelim. I think this examination is altogether excessive.

Out of six apprentices in this town, only two have passed Prelim. Apprentices are very difficult to get, and I expect when this exam. is fully realised they will be unattainable. (Salisbury, 9, 58.)

I took a youth at the latter part of last year as an apprentice. He started studying for Preliminary, after three months gave it up, and is not now likely to tackle it again. Apprentices are extinct here nearly, and cannot be had for any consideration. NORFOLK. (7/30.)

Chemist v. Vet.

SIR,—Your correspondent, H. Reeks, deserves well of his pharmaceutical brethren for his effort to remove the gross ignorance which exists in the ranks of chemists, as to the veterinary qualification. Passing strange it is to me, that I, with a diploma that cost so much, should be treated with an air of condescension by the shopman when I write a prescription for an animal, and ask a chemist to dispense it. I have said shopman intentionally, for this he is, and although required to pass a very good examination, and to be possessed of a very wide knowledge, he is and will remain a retailer of pennyworths, and a shopman bound to the counter, for a number of hours per diem. So great a number of hours that parents with any judgment will not apprentice their sons to a trade demanding professional attainments for which there is no return. Long hours, bad pay, heavy responsibility, all these are the chemist's, and that without compensation of any kind. There is not the scope which a draper enjoys, or any common trade, in which a fortune may compensate for an inferior social position, neither is there the leisure which the common or garden vet. enjoys. Almost anywhere he likes to dump down, the vet. can earn two or three hundred a year, and ride a good horse to hounds or engage in other sports. His client, not "customer," will send for him, and pay a visiting fee, as good as that paid to the medico. If the client comes to the vet.'s house, he will be asked to wait while the professional man finishes his morning cigarette in the next apartment; the latter will not come forward to the counter, "washing his hands with invisible soap in imperceptible water," and bowing in modest expectation of selling a pennyworth of pills or hair oil. The vet. who is not making money, will at least have abundant leisure, as the income I have mentioned can be compiled in very little time. A case or two a day, with intervals of a week with nothing to do, represents the average labour of a two hundred pounder in the veterinary profession. If he prefers to assist another gentleman, he will get two guineas a week in the house and be treated as a gentleman: he will not keep any fixed shop hours, but answer to calls when required, and his governor will not feel outraged at seeing him smoking his pipe very comfortably in the middle of the day. The army offers the newly qualified man 250*l.* per annum and the rank of lieutenant to commence with. What does it offer the pharmaceutical chemist, "bearing his blushing honours fresh upon him?" Why it offers him the same position as Mr. Thomas Atkins in the ranks, and by no merit can he rise to the position of a commissioned officer with which the veterinary fledgling commences. The latter may retire with the rank of general and pension pro rata. In your footnote, Mr. Editor, you have clinched the matter by referring to the four years' course and four examinations. One is a profession; the other is a trade, and that a duffing one, although demanding of its graduates a standard of attainment out of all proportion to any return for the outlay. I would apologise for the length of this letter, but having been a chemist myself, and never having ceased to take in the journals, I am greatly surprised at your clever correspondent "Xrayser" falling into the error he does asent the vet. Once having enjoyed the superior position of a veterinary surgeon, with all the liberty it brings, one cannot imagine subordinating it to the sale of cattle drinks, &c.

HAROLD LEINEY, M.R.C.V.S.

Status.

SIR,—The dispute between Mr. Bell and myself is based more on pharmaceutical status than on the word "craft." Mr. Bell recognises this, and thinks the outcome of my reasonings would be ruin to pharmacy. I do not see what greater ruin can overtake pharmacy under a new school than has already overtaken it under the old. The solution of our

difficulties, however, will not be found in either a study of fourteenth-century customs or present-day German practices. I believe when our road is discovered it will be found to be an altogether original one. We are not waiting for more men to study the complexity of the pharmaceutical knot, but for Alexander with his sword to cut it. I thought we had found him when Mr. Walter Hills turned up, but unfortunately he has proved to be the Rosebery of pharmaceutical politics. He has influence, ability, tact and determination, but he does not appear to have any great ambition to be a leader. I sympathise with him, but I think he ought to remember that he has a duty to the profession of which he is an ornament. Meanwhile, pending the arrival of the hour and the man, we may as ordinary mortals make an honest effort to get for pharmacy that status which is necessary to the securing of reasonable remuneration for our services, without incurring the dangers suggested by Mr. Bell. All thinking men will acknowledge that status and remuneration go hand in hand, as status means appreciation of services. There appear to be two ways of securing this appreciation; first by merit, secondly by sheer force of exaction. We have a proof of the first in the case of medical men, and of the second in the case of bankers. The banker is not called on by the State to give any proof of education or intelligence before he practices. He may be both uneducated and unintelligent, and often is so, but his status is assured. He has acquired it by holding up his head with the best of them—by exaction, in short. The chemist of to-day really merits superior status, but his humility and general self-effacement have kept him out of it. This wretched humility has done more to ruin pharmacy than all the judges and all the stores. Had chemists been more self-assertive, the judges never would have given the kind of decisions which have led on to ruin, and the stores never would have got a hold where that hold constitutes injustice and moral wrong. If it comes to a matter of merit, the pharmacist stands near the top. The banker only deals in money, the architect in stones and lime, or bricks and mortar, the engineer in steel and iron, the teacher and clergyman in books, but the chemist holds in his hands the issues of life and death. He must always have his mind concentrated on his work, his head clear and his hand steady, and he must always be at the call of the people, yet he calls himself a "craftsman" and the people look on him as a tradesman, rather inferior in importance to a large grocer or a Society hair-dresser.

September 23.

JAMES REID.

That Notice of Motion.

SIR,—Your correspondent, writing under the pseudonym "Veteran" complains of the personal nature of recent letters with reference to the "improper motion," draws an odious comparison and finally commits the very fault he finds distasteful in others. Mr. Glyn Jones undoubtedly possesses the courage of conviction, and although opinion differs as to whether a fighting attitude is to be preferred to incessant harmony, the danger of remaining in a groove is proverbial. The "labour of love" referred to by your correspondent should, of course, influence all who devote time and energy to public duties. Whether Mr. Glyn Jones does or does not attach due importance to such a sentiment we are not in a position to decide, but it is at least certain that the "hero of the hour" provides a good substitute in the direction of a plucky attempt to demonstrate a principle and a proof that actions speak louder than words. The Council also have a case—and in the absence of any theory to the contrary, it is not improbable that, from a red tape point of view, it is a strong one. The term "improper" should not be taken too literally, and in this particular instance may be accepted as implying that a discussion which might implicate members of the Council is undesirable and without precedent. The Council transacts the business of the Society, but does not deal with questions which are inseparable from the private affairs of its members. If the decision in the Reece case remains *in statu quo*, no doubt need be entertained with regard to the course open to those concerned. The Council cannot be coerced into a discussion theoretically out of order. Mr. Glyn Jones, in the unlikely event of an attempt to ignore the moral included in the protest, will still have a remedy, but it must be in another place. Yours faithfully,

Penzance, September 24.

WALTER H. KEEN.

SIR,—As a regular reader of the *Pharmaceutical Journal*, and as an old member of the Pharmaceutical Society, I resent very strongly the action of the Editor of that journal in connection with the correspondence against Mr. Glyn-Jones's so-called "improper" motion. My disapproval of the action of the Editor prompted me to address the following letter to that gentleman:—

To the Editor of the *Pharmaceutical Journal*.

SIR,—Having been connected with the Pharmaceutical Society for over thirty years, I claim the right to enter a protest against the action of the Editor of our journal in connection with the correspondence relating to "that notice of motion."

In the *Journal* of September 14, in a foot-note to the letter of Mr. Pilkington, the Editor "considers that . . . it is expedient to recognise . . . the claim of members of the Society to express their opinions in the correspondence columns; also to leave any question that may be raised by those letters, to the independent judgment of readers." I venture to think, sir, that if, when you inserted Mr. Glyn-Jones's letter on August 17, you had recognised the claim (and indeed the right) of members to the use of the correspondence columns, and left the matter to the independent judgment of readers, you would not only have acted upon the principle enunciated by yourself in the foot-note referred to, but you would also have exhibited the wise discretion which is expected from an experienced officer of any important society, and who should know that it is his duty to refrain from publicly expressing any opinion on a matter on which the governing authority are divided. Instead of this, you, by innuendo, cast serious reflections upon the accuracy and veracity of the writer of the letter (Mr. Glyn-Jones), and when your observations are categorically called in question by the writer, you exhibit considerable "slimness" in shrinking from any attempt to answer your critic, or to justify your previous aspersions.

Without saying one word on this occasion as to the merits or demerits of "that notice of motion," I feel compelled to raise my voice in strong protest against the Editor of the official journal of the Society using his position to belittle the writer of any letter therein, whether that writer be a member of the Council who appoint the Editor, or an ordinary member of the Society, or an outsider.

Shipley, September 17.

HENRY DUNN.

As the Editor, in the foot-note above referred to, had laid down the principle that members of the Society had a claim to express their opinions in the correspondence columns of the *Journal*, I am surprised to find that the Editor has, within one week, discarded the principle he laid down and suppressed my letter. This morning I received a communication from the Editorial Department, of which the following is a copy:—

The *Pharmaceutical Journal*, Editorial Department,
London, September 20.

SIR,—I am desired by the Editor to acknowledge receipt of your letter of 17th inst., and also to inform you that he considers it unsuitable for publication in the official journal of the Pharmaceutical Society.

Mr. Henry Dunn, Shipley.

Faithfully yours,
SAMUEL T. FROST.

In consequence of this attempt to stifle criticism and discussion I am constrained to send this communication to you, with the hope that other readers of your journal, who are also members of the Pharmaceutical Society, may be induced to exercise their voices and influence in putting a check upon the high-handed and grossly unfair action of the Editor of the *Pharmaceutical Journal*.

Yours faithfully,

Shipley, September 21.

HENRY DUNN.

Mr. Joseph Hindle (Blackburn), also desires us to state that the letter by him on the same subject, printed in the *C. & D.* last week page 511, was similarly refused insertion as being "unfit for publication in the official journal."

Mr. Sharman's letter (*C. & D.*, September 21, page 511) was also refused insertion for the same reason.

Sealing Jet.

SIR,—It is admitted that the burner on the bunsen principle is the correct thing. In fact a small bunsen burner is now made to be attached to the sealing jet, but this is too large, consumes too much gas, gives trouble owing to it lighting at the bottom, and it always burns with a roar. What I have successfully used for the last two years is an acetylene burner, which can be purchased from any gasfitter for the modest sum of twopence. This burner gives a atmospheric flame, burns without noise, is free from any

disagreeable smell, never requires attention, and burns the minimum amount of gas. Can be used equally well with a perpendicular or horizontal jet.

Yours truly,

WILLIAM IZON.

Aston, September 19.

Substitution and the P.A.T.A.

Mr. J. H. Coleman (Wolverhampton), writing in regard to the advertisement of Woodward's gripe water in the last issue of the *C. & D.*, says in that town "the gripe water is sold at 9d. each, and it is listed in the London price-lists at 9s. Mr. Woodward would find that very few chemists would substitute if there was a reasonable profit, say wholesale price 9s. and lowest retail selling price 1s." Our correspondent also notices that "Mr. Geddes is advising chemists to go in for and push St. Jacobs Oil, but he gives no promise or sign that the retail price will be protected. Is it going to be, or cut to cost as it used to be?" He hopes both Mr. Woodward and Mr. Geddes will put their goods on the P.A.T.A., or protect them in some other way.

Dispensing Notes.

A section for the elucidation of difficulties and interchange of views on dispensing-problems.

Phenol and Quinine Valerianate in Pill.

3/15. *Dispenser* wants to know how to get the best pill of the following:—

Quinina valerianat...	...	...	gr. j.
Acidi carbolic...	...	...	gr. j.
Ol. cajuput ...	...	...	mj.

M. Ft. pil.

[We have made a very good pill with equal parts of powdered soap and calcium phosphate.]

Menthol Spray.

2/58. *J. E. F.* asks how the following can be dispensed clear:—

Menthol ...	...	...	gr. iij.
Sodii bicarb. ...	...	...	gr. xl.
Sodii chloridi ...	...	...	gr. xl.
Glycerini ...	...	...	3j.
Aq. ad ...	...	...	3vj.

[This cannot be made a clear solution. The usual method is to put the menthol in a dry bottle, add a few drops of spirit rapidly fill up with water, filter, and add the salts.]

Codeine and Nux Pills.

241/15. *Assistant* has occasion to dispense pills containing codeine and ext. nucis vomica, which he masses with glyc. tragacanth. The customer says that on standing a few days they develop a green colour, and he considers they are not so active then. What is the reason for this change of colour, and can it affect the action of the pills in any way?

[We have not been able to obtain this colour. Extract of nux vomica contains copper in variable amounts, which would probably give the green colour complained of, owing to the alkaline action of the codeine upon the copper salt, just as in mixtures containing the tincture with sal volatile the colour is sometimes very pronounced, partly due, no doubt, to change in igasuric acid also. The therapeutic action is not likely to be affected.]

Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists' Diary," 1900, pages 212-226, and pages 259-262.

9/31. *Apprentice*.—The sale of benzine in pennyworths is usually permitted by the local authorities. See THE CHEMISTS' AND DRUGGISTS' DIARY, 1901, page 224.

9/21. *Datura*.—Proprietary articles manufactured in Ireland and sent by post to Great Britain are not subject to stamp-duty, because the sale is made in Ireland, where the duty is not chargeable.

8/47. *J.M.*—The transfer of a mortgage from one person to another is perfectly legal, and the interest on the mortgage is payable to the holder thereof.

9/47. *Lex.*—Having entered upon your tenancy in November, it is necessary for you to give notice in June for termination of the tenancy at the Christmas term. It is possible, however, that your landlord may accept some other arrangement.

7/34. *Chemists.*—If you instruct a wholesale house to send goods by a certain carrier, you paying carriage, delivery of the goods to the carrier is equivalent to delivery to you. In the event of damage, claims should be lodged by both parties.

8/40. *Pole Star.*—(1) Chemist A has no right to open an envelope addressed to chemist B, and to extract therefrom a prescription, compound it, and charge the customer for it. (2) It is not customary to give assistants a holiday until they have served a year. (3) For a *locum tenens* 30s. a week without board and lodgings is exceptionally low pay; but your question is much too general for a specific reply as to whether more could be enforced in your case.

8/53. *Export.*—It is perfectly clear that the transaction which you describe does not come within the exemption to medicine-stamp duty provided in the case of medicines consigned from the maker in Great Britain to a consignee abroad, because in your case the order is received by you from a wholesale house in this country to be forwarded by you to the consignee (their client, and not your agent), payment being made by the wholesale house to you. That, clearly, is a transaction between you and the wholesale house, initiated and completed in Great Britain, and the medicines must accordingly be stamped. It is absolutely necessary, when the medicines are unstamped, that they should be consigned by the maker to his own agent abroad; in fact, it is understood that the medicines so shipped do not in law cease to become the property of the maker. There is a clear transference of property in the case described by you.

1/17. *Teeth.*—As you do not in the booklet use any dental titles, nor profess to be registered under the Dentists Act, it will not on that account bring you into trouble; but you "guarantee to give complete satisfaction in every case" of artificial-teeth fitting that you undertake, and your "instruments and appliances are the latest and best obtainable, and the work is thoroughly up to date," from which it may be assumed by the dental authorities that you hold yourself out or describe yourself as "a person specially qualified to practise dentistry," which is an offence under the Act. The only loophole for you is in the interpretation of Section 3 of the Act, which refers to "any name, title, addition, or description . . . whether expressed in words or letters, or partly in one way and partly in another." If a narrative of one's ability is not a "description" you are safe. We have previously expressed the opinion that no competent Court would interpret the term "specially qualified" in Section 3 in any other sense than qualified by some specific authority, and upon this point the dental authorities declined to cross swords with us.

7/74. *Lex.* was asked by a policeman to show him his poison-book, as there had been a poisoning case in the neighbourhood. *Lex.* declined, and was served with a summons to appear before the Sheriff for examination. He did, and instead of seeing the Sheriff, the procurator fiscal desired to examine him. *Lex.* declined, on principle, to answer his questions. He now asks our advice especially (1) having attended at citation and given information, is he entitled to a fee? If so, would it be a professional fee, 1*l.* 1*s.*? (2) Could a procurator fiscal get a warrant to take possession of poison registers in the event of information being refused to police officers?

[Our correspondent would be perfectly justified in refusing to produce his poison-book or any other document until he is properly subpoenaed before a legal tribunal. Before being sworn he should ask for his expenses, and he cannot be compelled to give evidence without being paid. When once he is sworn he is helpless in the matter. We should say that the whole of the proceedings referred to in our corre-

spondent's statement were irregular, but we do not think he can recover any expenses. In England, and no doubt in Scotland, chemists are not allowed professional fees, and only get those of ordinary witnesses. A very good reply to make to an inquisitive officer would be that a chemist considers his customers' affairs to be of a confidential nature, and therefore does not feel justified in giving information without the customer's written consent, which the officer can be asked to obtain as a preliminary.]

5/21. *Enquirer.*—A dressmaker's apprentice cannot be required to act as a domestic servant, and we should say that our correspondent would be justified in removing his daughter (who has been apprenticed to a dressmaker, and has been ordered to do domestic work), and treating the indentures as at an end. This, however, is not perhaps the strictly legal course to follow, and we should suggest that his daughter should refuse positively to do any domestic work, or to work after the usual business hours, and that an action should be commenced against the employer for breach of the apprenticeship articles. Probably a letter threatening these proceedings would be sufficient.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

229/16. *Phenacetin.*—The powder for increasing brilliancy of oil-lamps is simple table-salt. Is it of any use for the purpose, bearing in mind that salt is insoluble in paraffin?

252/14. *Saidlitz.*—The solution used for clearing vegetable matter from pipes through which beer has been conveyed is a solution of caustic soda, about 2 oz. of sodium hydrate in 1 pint of water.

195/3. *Vix.*—(1) Indigestion-mixture as your sample:—

Glyc. pepsini ...	...	...	...	3ss.
Ac. hydrochl. dil. ...	...	...	...	3j.
Tr. card. co. ...	...	...	...	3ij.
Aq. chlorof. ad ...	...	...	...	3iiss.
3j. pro dosis.				

(2) Indigestion-remedies are not necessarily administered in an acid mixture; it depends on the purpose. Pepsin is administered in dyspepsia caused by a deficiency of gastric juice, and needs to be slightly acid; but in dyspepsia caused by excessive secretion of acid gastric juices, alkaline mixtures are indicated.

246/5. *H. J. C.*—Examinations for Opticians.—See Educational number (September 7), page 438.

244/13. *M. C. C.*—The Ice-cream Cups (patent No. 3,168, 1901) are made from "dough or paste in a fluid state, preferably composed of the same materials as are employed in the manufacture of biscuits." The patent protects the process, the apparatus, and the use of the biscuit cups or dishes for ice-cream.

255/19. *Photo.*—(1) Balsam of Sulphur.—Heat 1 pint of olive oil in a large iron vessel, and add 2 oz. sublimed sulphur in small quantities at a time, continuing the heat until combination takes place. (2) The Pharmacopœia does not place restrictions on the use of any apparatus in which the various chemical liquors are to be made. What size flasks and dishes to use is obviously a matter which you, as a chemist, are quite capable of judging.

223/73. *Nemo.*—Stocktaking Deductions.—The practice varies, but 10 per cent. should be deducted from the market-price of the stock of drugs. In the case of proprietary articles average prices can safely be taken, but a deduction must be made in the case of any of the articles being shopworn. For depreciation of fixtures and utensils 15 per cent. is generally deducted each year.

245/33. *Gas-stove.*—The Clarke's syphon-stoves advertised in the *C. & D.* are excellent as well as economical for warming a chemist's shop or laboratory.

234/4. *Tussis*.—Cough-mixtures.—It is the best plan to have two cough-mixtures for retailing, one for children and the other for adults, because the sedatives which give relief to adults are not suitable for administration to children. For this reason we give two formulas:—

(Children's Cough-mixture.)

Syr. marrubii	...	...	...	3vij.
Acet. scillæ	...	...	...	3ij.
Ammon. bromid.	...	...	...	3ss.
Vin. ipecac.	...	...	...	3j.
Mellis	...	...	...	3xij.
Aq. ad...	...	...	...	3xxx.

Heat the syrup, honey, and about 5 oz. of water together in a water-bath, removing the scum that rises, and strain. When cold add the remaining ingredients.

The doses for children of various ages will be as follows:—2 to 4 years 20 drops, 4 to 6 years 40 drops, 6 to 10 years 1 teaspoonful two or three times daily, or more often if the cough is very troublesome.

(Adult's Cough-mixture.)

Ol. anisi	...	...	...	mxl.
Tr. tolu.	...	...	...	3iv.
Tr. senegæ	...	...	...	3iv.
Chlorodyni	...	...	...	3vj.
Oxymel scillæ	...	...	...	3xv.
Inf. lini ad	...	...	...	3xxx.

Mix the oil with the tinctures, and dilute with a small quantity of the infusion before adding the other ingredients.

Dose: One teaspoonful three times a day.

224/18 *S. E. G.*—You do not give any idea as to where the fleas congregate in the farmer's yard. Is it in the surrounding walls, in the earth, or are there wood cattle-pens to harbour them? Chlorinated lime spread on the ground and lime-washing of the walls, if thoroughly done, cannot but be effectual in any ordinary case.

246/4. *Salol*.—Syr. Rhei et Potassii Compositus, N.F. (Neutralising Cordial):—

Fluid extract of rhubarb, U.S.P.	...	17.5 c.c.
Fluid extract of hydrastis, U.S.P.	...	8.5 c.c.
Potassium carbonate	...	17.5 c.c.
Tincture of cinnamon, U.S.P.	...	65 c.c.
Spirit of peppermint, U.S.P.	...	8 c.c.
Syrup	...	250 c.c.
Diluted alcohol	...	a sufficiency to make 1,000 c.c.

The fluid extract of rhubarb is a 1-in-1 preparation, the rhubarb in No. 30 powder being exhausted with a mixture of 3 parts of alcohol and 2 of water. The B.P. ext. hydrastis liq. is equivalent to the U.S.P. article. Tincture of cinnamon, U.S.P., is half the strength in cinnamon of the B.P. Spirit of peppermint, U.S.P., is uniform with the B.P. spirit. Forty-five-per-cent. alcohol, B.P., is the nearest to "diluted alcohol," U.S.P.

254/27. *White Ink*.—The liquid used for producing white writing on blue paper is either liquor potassæ or solution of potassium carbonate. The decoloration depends on the fact that commercial blue paper is coloured with Prussian blue or allied substances, the potassium ferrocyanide resulting from the reaction being practically colourless.

245/17. *D. G. B.*—Moulds for Plaster-casts.—These are hard paraffin, variously coloured for convenience in distinguishing cast and mould.

245/70. *H. D. T.*—Oil of Cedar used in microscope-work is the oil distilled from the wood of red cedar, *Juniperus virginiana*, and consists of cedrene and cedar-camphor. Its use depends on the fact that with high-power objectives it is necessary to utilise all marginal pencils of light. This is done by using a liquid such as cedar oil or glycerin containing stannous chloride or other salt in solution of the same refractive and dispersive power as the front lens of the objective, so that the lens and the liquid are optically homogeneous.

4/26. *Peakrit*. *White Ink for Ticket-writing*.—Mix flake-white or finely-levigated oxide of zinc with a sufficiency of solution of sodium silicate—commonly called water-glass

53/2. *Veritas*.—Antiseptic Toilet-cream.—The following may suit your purpose. It is a nice, pleasant preparation to use:—

Anhydrous wool-fat	...	...	...	4 oz.
Almond oil	...	...	...	1 oz.
Glycerin of bor'ic acid	...	...	...	½ oz.
Essence of witch-hazel	...	...	...	1 oz.
Orange-flower water	...	...	...	½ oz.
Otto of rose	...	...	...	6 drops
Oil of ylang-ylang	...	...	...	5 drops

Rub the wool-fat and the oil together in a warm mortar. Mix the liquids, and gradually stir into the fats. When this is done add the perfumes. Stir well, and put up in opal bottles or collapsible tubes.

2/53. *Bogie* wants a formula for Bunkum's American Kidney-pills, which he wishes to sell for backache, gravel, Bright's disease, inflammation of the bladder, diabetes, congestion of kidneys, &c. Two pills are to be taken three times a day, before or after meals, and they are not to be purgative. We have not a formula to fill this order absolutely. How would the following suit "Bogie"?—

Pil. rhei co.	...	...	...	pt. ij.
Pil. scillæ co.	...	...	...	pt. ij.
Ext. hyoseyami	...	...	...	pt. ij.
Hydrastin (resin)	...	...	...	pt. j.

Mass, and divide into 2-gr. pills.

9/33. *Lavender*.—The best way to Perfume a Large Hall in which a bazaar is to be held is to go through the hall spraying the perfume by means of a spray-producer shortly before the bazaar is opened. You must spray very liberally, and especially upon any woven fabric which will retain the perfume. Perfume should also be liberally sprinkled upon the doormats and other matting in the hall.

9/1. *Glycyrrhiza*.—Proctor's "Manual of Pharmaceutical Testing" (*C. & D.* office, 2s. 6d., or from any wholesale house) gives tests for nearly all B.P. chemicals, but it does not deal with such galenic preparations as compound liquorice-powder and Gregory's powder. Pearmain & Moore's work on "Milk and Butter" (published by Ballière at 5s.) will give you all the information you require regarding milk-analyses.

9/15. *E. T.*—The sea-salt to which you refer is really what it pretends to be—a crystallisation from sea-water.

5/45. *H. S.*—Syr. Picis, U.S.P.:—

Tar	...	...	...	3iiss.
White sand	...	...	...	3iij.
Water	...	...	...	3vj.

Mix the sand and the tar in a mortar, and pour on the water. Stir, and repeat the stirring occasionally during twelve hours; reject the water. Then pour upon the tar and sand—

Boiling water... 3xiiij.

Stir for fifteen minutes, and add—

Glycerin ... 3iij. 3ij.

Set aside for twenty-four hours, stirring occasionally; then filter. Dissolve in the filtrate—

Sugar ... 3xxviss.

and bring up to 32 oz. with water if necessary.

Dose: 3ij. or more.

Syr. Picis Liquidæ, B.P.C.

Tar	...	...	...	1½ oz.
Water	...	...	...	3 oz.
Boiling distilled-water	...	...	...	8 fl. oz.
Glycerin	...	...	...	2 fl. oz.
Sugar	...	...	...	16 oz.
Distilled water	...	...	...	a sufficient quantity

Mix the tar intimately with about 1 oz. of white sand; pour on the water, and stir frequently during twelve hours; then pour off the water and throw it away. Pour the boiling distilled water upon the residue; stir well and frequently during fifteen minutes; add the glycerin, and set the vessel aside for twenty-four hours, occasionally stirring. Decant the clear solution, and filter. Dissolve the sugar in the filtrate with the aid of a gentle heat; allow the liquid to cool, then strain it, and pass enough distilled water through the strainer to make the product measure 1 pint. Mix thoroughly.

Dose: 1 to 2 fl. dr.

4/43. *Yorkshireman*.—We expect that what you mean by "caltha" or "calthos" is *Catha edulis*, about which you will find some particulars in THE CHEMIST AND DRUGGIST of August 24, page 344.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

- 6/40. Makers of glass beakers.
 11/35. Makers of "Anchor" brand seamless tents
 1/36. Makers of "Sugi-mugi" disinfecting-powder.
 6/56. Makers of a disinfectant called "Chloro-naphtholeum."
 12/3. Addresses of manufacturers or importers of cedar-wood oil and oil of wintergreen.

Coming Events.

Notices of forthcoming meetings are inserted in this section free of charge. Secretaries should send such notices to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C., so that they may be received not later than Wednesday of the week of publication; if later, by telegram to "Chemicus London."

Tuesday, October 1.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, London, W.C. Opening of the sixtieth session of the School of Pharmacy. Distribution of prizes and the presentation of the Hanbury gold medal by the President, and the inaugural sessional address by Mr. Arthur P. Luff, M.D., B.Sc.(Lond.), F.R.C.S. At 3 o'clock P.M.

ROYAL VICTORIA HALL, WATERLOO ROAD, S.E.

The following are the arrangements for Tuesday evenings at the above hall during October, 1901:—

October 1.—Distribution of prizes by Sir Philip Magnus to students of the adjoining Morley Memorial College, and performances by the choir and gymnastic class of the same.

October 8.—Mr. A. Smith Woodward, LL.D., F.R.S., on "Bone-digging in Greece."

October 15.—Mr. W. H. Hinkley, F.C.S., on "Photography in Natural Colours."

October 22.—Mr. C. H. Everard, on "The Last Days of Nelson."

SHEFFIELD PHARMACEUTICAL AND CHEMICAL SOCIETY.—Inaugural meeting at the Literary and Philosophical Society's Rooms, Leopold Street, Sheffield, on October 17, at 6.30 P.M. Distribution of prizes by the President, and inaugural address by Mr. John Taylor, of Bolton, at 7.45 P.M. Annual dinner in the Wharfedale Hotel. Tickets may be obtained from Mr. Antcliffe, Hon. Secretary, Union Offices, Sheffield.

GRESHAM LECTURES will be delivered publicly at 6 o'clock P.M. in the theatre of Gresham College, Basinghall Street, E.C., as follows:—Physic, by Dr. E. Symes Thompson, on October 5, 9, 10, and 11; Law, by Mr. G. H. Blakesley, on October 29, 30, and 31, and November 1; and Astronomy, by the Rev. E. Ledger, F.R.A.S., on November 12, 13, 14, and 15.

NEWCASTLE-UPON-TYNE AND DISTRICT CHEMISTS' ASSOCIATION.—The annual meeting will be held in the Hôtel Metropole, Clayton Street West, Newcastle, on Wednesday, October 9, at 8.30 P.M.

CARDIFF CHEMISTS' ASSOCIATION.—The *conversazione* arranged for this week has been postponed in consequence of the fine weather, and will be held next month.

MAKING THE DEAF HEAR.—It is reported that, at the approaching autumn meeting of the St. Petersburg Medical Society, an electrical invention by a doctor for restoring the hearing of the deaf will be demonstrated. The apparatus is a light india-rubber shell, furnished with a miniature microphone which intensifies the vibration of the sound-waves considerably. In order to hear any conversation it is only necessary to place the apparatus, which is connected with a small galvanic battery, to the ear and close the current. The apparatus, with the help of the microphone, reacting on the auditory nerve, is said to be capable of reproducing even the softest speech.

The Galen Glee Club.

Second Night—The Madrigal.

With mighty pipe-bowl, reeking flaky fumes
 Which circle to the ceiling, peaceful sits
 The scarred, pen-wielding Warrior who consumes
 His days in thinking, and in giving fits
 To bold Intruders who would seek to brave
 His Most Serene Omnipotence and do
 What he hath told them not to. Counsel gave
 He to our Rulers ere these Upstarts knew
 The rudiments of speech. He proudly bears
 His silent sorrow, and the nectar quaffed
 With kindred spirits thus makes light his cares,
 And helps to promulgate *Die Wissenschaft*.

The deep Teutonic methods Schreiber learned,
 The ponderous thinking and the laboured style
 That marked the Teufelsdröckian sage who yearned
 For star-communion, could not reconcile
 The Present with the Past, nor could he write
 A sentence having less than forty words,
 Involving dashes, commas, seven quite,
 And struggling with our language till it curds
 In hopeless blood-clots on the reader's brain,
 Inducing dim bewilderment, despair,
 And then dementia, should he try again
 The tangled skein of scribblings to compare.

Thus learr'd Schreiber, dreaming vaporous dreams
 And spoiling paper till in quires and reams
 The ghosts of murdered prophecies arise,
 And wail their protestations to the skies.
 But Schreiber heeds not, he hath sneered and laughed
 At eager brethren—void of *Wissenschaft*,
 But panting for reform, and seeking good
 When Apathy destroyed true Brotherhood.
 For years he hath done this—then why should he
 From high estate descend to such as ye?

"We are of Heaven, ye of the Earth," he saith.
 "Why, then, forsake your long-continued faith.
 Your speech is not so seemly nor so low
 As once it was it was in years not long ago.
 Beware lest outraged Heaven's justice fall,
 And listen while we chirp our Madrigal":—

THE CUFF AND THE COO.

When the summer sun is shining,
 And the daisies twinkle bright
 In the meadows; leaves entwining,
 Blossoms falling left and right,
 Little lambkin playful gambols,
 Skittishly we skip with glee
 O'er the fields to gather brambles,
 With no thought of pharmacee.
 Pensive heifer glumly gazes
 Through the trees, and swipes the flies,
 Till, with tail erect, like blazes,
 Forth across the world she hies.
 Then come we with gentle cooing,
 Sting of painful gnat to soothe,
 Cooing, cooing, ever cooing,
 Making ruffled tempers smooth.

While the wintry winds are blowing,
 And the earth in snowy pall
 Silent lies, 'tis then the sowing
 Of dissension's seeds befall.
 For the trade associations,
 Meeting, talking, seeking fights,
 Casting off their time-worn patience,
 Liken us to troglodytes.
 Hard our lot and ever harder,
 As each speaker has his say,
 Tremble we for well-filled larder,
 For each dog has but his day.
 Then we try spasmodic cuffing,
 Trusting that may ease our pain.
 Cuffing, cuffing, ever cuffing,
 Till the sunshine come again.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C. : September 26.

THERE is no special feature to record in the markets this week, business for the most part (with the exception of a few articles), being quiet. In essential oils, American and Japanese oils of peppermint continue to advance; oil of star anise is also firmer, but cassia oil is very quiet. Senega is again dearer, and sellers are very reserved; Canada balsam is also higher, and so are Persian galls. In chemicals, citric and tartaric acids and cream of tartar are all flat, and sulphate of copper is lower in sympathy with the fall in the metal. At the vanilla auction, the quantity offered was said to be the largest on record, and prices dropped 2s. to 4s. An auction of cinchona was held on Tuesday, but it is quite overshadowed by the one to be held at Amsterdam next week, when 27 tons of quinine in the bark will be offered. The shellac market has been excited, and a considerable speculative business has been done at several shillings advance. Quinine is quiet, and no business of importance has transpired this week. The drug-sales are reported on page 557, and the following table shows the fluctuations during the week:—

Higher	Firmer	Easier	Lower
Aloes (Cape)	Balsam, Tolu	Acid, citric	Cardamoms
Aniseed (Russ.)	Oil, anise, star	Benzoin	(fine)
Balsam Canada		(Sum.)	Copper
Canary-seed		Cream of	sulphate
Galls (Pers.)		tartar	Oil, lime
Menthol			(W.I.)
Oil, pepper-			Vanilla
mint			
Petroleum			
Pimento			
Senega			
Shellac			
Wax, bees' (Jam.)			

Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom from September 19 to 25, both inclusive:—Bismuth (@ Antofagasta), 82 sks.; cardamoms, 38; cascara sagrada (@ Hamburg), 126; caraway-seed, 25; chamomiles, 10; cinchona (@ Paita) 26 serons, (@ Mollendo) 227 bls.; coriander-seed, 200; drugs (@ Fiume), 41; ergot (@ Hamburg), 2; essential oils (@ Hong-Kong), 10; gentian, 29; herbs (@ Hamburg), 16 bls.; honey (Chilian), 248 brls.; insect-powder, 60 pkgs.; opium (@ Smyrna), 50 cs.; peppermint oil (@ Hamburg), 7; potash chlorate (Swed.), 40 kgs.; quillaia, 1,341 bls.; roots (@ Hamburg) 6 bls.; (@ Antwerp) 20 bls.; (@ Aden) 178 bgs, (@ Marseilles) 16 bds.; saccharine, 4 cs.; tamarinds (@ Madras), 35 bds.; turmeric (@ Calcutta), 15 bgs.; wax, bees' (Chil.) 25, (@ Aden) 102, (@ Calcutta) 14.

Liverpool Drug Market.

Liverpool, September 25.

CASTOR OIL.—The absence of demand from the manufacturing districts has had a depressing effect upon castor oil generally, and good seconds Calcutta is slightly easier at $3\frac{1}{4}d.$ to $3\frac{5}{16}d.$ First pressure English and French are obtainable at $3\frac{3}{16}d.$, and second-pressure English and French at $3d.$ Rather better prices are quoted forward.

BEE'S WAX.—A small sale of Peruvian is reported at 7l. 5s. No actual business has transpired in Chilian during the week, but there is a rather better inquiry on the market, and prices may advance.

GUM ACACIA.—Sales of hard amber description have taken place during the week at 36s. and 42s. per cwt., but the volume of business has been somewhat restricted.

CANARY-SEED.—Good bright Turkish continues to exhibit great steadiness, and 170 bags have changed hands during the week at 32s. per qr.

TURPENTINE is easier for the week at 27s. per cwt.

HONEY.—There have been further arrivals, but no business of importance has taken place; 19s. to 20s. is still asked for Pile 3 Chilian, and 21s. to 22s. for Pile 2, and 24s. to 24s. 6d. for Pile 1. Small lots of Jamaica have been sold at 17s. 6d. to 20s. per cwt.

SULPHATE OF COPPER is steady at 21l. 15s. to 22l.

QUILLAIA-BARK.—There have been further arrivals, but importers still ask 13l. per ton.

AFRICAN GINGER.—Thirty bags of fine Sierra Leone description have found buyers at 35s.

IRISH MOSS.—Considerable sales of the new crop have been made at prices ranging from 5l. to 8l., according to quality.

COPAIBA.—Demand is quiet, with a small sale of cloudy Maranh at 2s. 0½d. per lb.

WAX, CARNAUBA.—Slow of sale. About 30 bags have been sold at 60s. for fair medium, and a few lots of yellow at 64s. to 70s. per cwt. There is very little inquiry for grey.

American Drug Market.

New York, September 17.

The drug-market is quiet, with transactions wholly of a routine character.

ALOES.—Curacao is easier, owing to heavy stocks. Quotations are nominally 3½c. to 4c. per lb., but these figures can be shaded for quantity.

BALSAMS.—Copaiba is dull, and in the absence of demand quotations are nominal. Peru is in good supply, but dealers are holding off for higher prices. Small lots may be bought at \$1.30. Tolu is nominally unchanged at 26c., but a firmer feeling is evident, owing to the disturbances in Central and South America.

BEE'SWAX is quiet but firm, at 29c. per lb. for ordinary puro.

BUCHU is moving slowly, and 26c. will now buy good green leaves.

ERGOT.—Russian is easy at 41c. per lb., and Spanish at 44c.

GOLDEN-SEAL.—(Hydrastis) is offering more freely, and quotations show a decline. Prices range from 50c. to 57c. per lb., according to quality.

JABORANDI is scarce, and for prime goods 15c. to 17c. is asked.

MENTHOL can be bought on the spot at \$1.50, and to arrive at \$3.85 per lb.

NUX VOMICA is very firm, and 3c. seems to be an inside figure for first-quality seeds.

PEPPERMINT OIL.—Case oil is quoted \$1.80 to \$2.00, and very firm. Tin oil is higher at \$1.45 to \$1.60 per lb.

SENEGA has advanced to 43c. Supplies are very light, and there seems to be little prospect of much root being dug, although the present high market may induce some diggers to go to work.

SERPENTARY.—Prime quality Texas root is held at 44c. to 46c. per lb., and is a scarce article.

German Drug Market.

Hamburg, September 24.

Our drug-market shows more business in general; several articles, as senega, peppermint oil, menthol, &c., meet with greater interest at steadily advancing prices.

AGAR-AGAR is firm at 355m. per 100 kilos.

ALOES.—Cape is steady at 65m. per 100 kilos.

ANTIMONY is dull and lower at 27½m. per 100 kilos.

CAMPHOR.—Refined is firm, with second-hand sellers at 425m. 430m. per 100 kilos.

CONDURANGO is steady at 80m. per 100 kilos.

ERGOT is steady; Russian at 350m., and Spanish at 330m. per 100 kilos.

GOLDEN-SEAL is quoted to-day at 565m. per 100 kilos.

IPECACUANHA.—Rio is firm at 23m., and Cartagena at 13½m. per kilo.

JAPANESE WAX is firm at 67m. per 100 kilos.

MENTHOL is very firm and advancing. Spot is scarce and held at 32m., and forward delivery at 28m. per kilo.

QUININE is neglected, with second-hand sellers at 39m. to 38m. per kilo.

SANTONIN is very firm at 37m. per kilo.

SENEGA-ROOT excited and rapidly advancing; 535m. per 100 kilos. has been paid.

STAR-ANISE is firm at 120m. per 100 kilos.

OILS (FIXED).—Castor is quiet and neglected. Linseed is weaker. Cod-liver oil unchanged at 65m. per barrel.

OILS (ESSENTIAL).—Star-anise oil is unchanged at 11m. per kilo. Peppermint oil very firm and advancing, HGH being held at 8m. per lb.; and Japanese ditto at 8½m. spot, and forward at 8½m. per kilo.

Cablegrams.

SMYRNA, September 26, 10 A.M.:—Ten cases of opium, new current talequale, have been sold during the week at 8s. 6d. per lb. The prices of the old and rich qualities are still being firmly maintained.

HAMBURG, September 26:—Lycopodium is very scarce and wanted here; 430m. per 100 kilos, is asked. Senega-root is very firm at 540m. per 100 kilos. for Western. Both menthol and peppermint oil are very firm.

London Markets.

ACID, CITRIC.—Flat, at from 1s. 2d. to 1s. 2½d. per lb.

ACID, TARTARIC.—Quiet and unchanged, with English crystals or powder quoted 1s. 0½d., and foreign 11½d. per lb.

ANTIMONY.—Business has been done in crude Japanese (black sulphide) at 18l. per ton.

ARROWROOT is quiet. At auction on Wednesday all the St. Vincent offered was bought in at 1½d. to 1¾d. per lb. for ordinary quality.

BALSAM CANADA continues to advance, 1s. 11d. per lb. having been paid for 1-cwt. kegs. It is reported that there will be practically no crop this year, and as there is very little on the spot extreme prices are looked for.

BALSAM TOLU.—Owing to unfavourable reports from Central America, and the political troubles, a firmer feeling has developed.

CASSIA LIGNEA.—Quiet. The nominal value of new selected is 44s., and good old 51s. per cwt.

CINCHONA.—At auction on Tuesday, the small supply of 1,828 packages was offered, of which the bulk sold, with good competition, at an average unit of 1¾d., against 1½d. at the last London sale, or a slight advance on the Amsterdam unit. A large supply of Bolivian cultivated Calisaya cinchona was offered, and met a good demand.

The following table shows the amount of bark offered and sold:—

	Packages offered.	Packages sold.
Bolivian cultivated Calisaya ...	979	979
East Indian	343	268
Java	236	191
Ceylon	226	200
West Coast African	44	44
	1,828	1,682

The following were the approximate quantities of bark purchased by the principal buyers:—

	Lbs.
The Brunswick factory	59,143
The American and Italian factories	52,934
The Mannheim and Amsterdam factories	40,265
The Paris factory	15,412
The Frankfurt and Stuttgart factories	11,024
Messrs. Howards & Sons	2,900
The Imperial factory... ..	1,500
Druggists, &c.	13,214

Total quantity sold	196,392
Bought in or withdrawn	27,194

Total quantity offered 223,586

The following prices were paid:—

WEST COAST AFRICAN.—Broken quill, 5½d. to 6d. per lb.

SOUTH AMERICAN.—Bolivian cultivated Calisaya, flat, 1s. 3d. to 1s. 3½d. per lb.; quill, part broken, 5d. to 7½d.; rich, 8½d. Cartagena, small soft, 1½d. per lb.

CEYLON.—Officialis, chips and shavings, 2½d. to 3½d. per lb. Red stem, renewed, 3½d. to 4½d.; chips and shavings, 2½d. to 4d.; broken quill and chips, 2½d. to 4½d.; and root, 4d. to 5d. per lb.

EAST INDIAN.—Ledgeriana, renewed, 4½d. to 7½d.; root, 5½d.; and quill, 7½d. Brown, renewed, 4½d. to 6½d.; chips and shavings, 2½d. to 5½d.; branch, ¾d. to 3¼d. Red, renewed, 4½d.; chips and shavings, 2½d. to 3½d.; and root, 1½d. to 2½d. per lb.

JAVA.—Ledgeriana branch, 4½d. to 6½d.; stem-chips, 7d. to 10½d. Succirubra root, 3½d. to 5d. per lb.

To the Amsterdam auctions, to be held on October 3, 1,912 bales (170,807 kilos.) have been added, so that the total amount to be offered amounts to 6,155 bales and 307 cases, totalling 577,375 kilos. The stock in first hands at Amsterdam on September 18 consisted of 2,348 packages Government and 8,528 packages private bark, including the quantity to be offered at the above auctions. In the drug-auction, 3 bales of thin flat Calisaya bark, partly damaged, sold readily at 1s. 3½d. per lb.

COPPER SULPHATE is easier, with spot sellers of good brands at 21l. 5s. per ton.

CREAM OF TARTAR.—Flat. Best white French crystals are now quoted at 71s. per cwt. on the spot, and powder at 73s. to 73s. 6d.; 95-per-cent. powder is 75s., and 98-per-cent. foreign powder 76s. 6d.

CUMIN-SEED.—The exports from Malta during 1900 amounted to 5,783 cwt., against 1,892 cwt. in 1899.

GALLS.—In blue Persian galls the market has been practically cleared of second-hand parcels at 61s. per cwt. Importers are still holding out for extreme figures, 70s. being wanted for blue. It is said that the Persian crop this year is a failure, so that the surplus from the good crop last year will now be drawn upon.

GINSENG.—The U.S.A. crop, especially in Texas County Missouri, is reported to be very badly damaged as regards seed, so that next year's crop is jeopardised thus far in advance.

GUM TRAGACANTH.—A public auction will take place on October 3, when practically the entire stock will be offered. Meanwhile, orders are being held back where possible.

LINSEED is very firm, and will probably be dearer.

MANNA.—It is reported that prices are hardening in Palermo owing to the prevalence of storms, which have affected the gathering of the new crop.

MENTHOL is another 6d. to 9d. dearer on the spot, up to 14s. 6d. per lb. having been paid for Kobayashi crystals. For arrival business has been done at from 12s. 6d. to 13s. c.i.f. for good brands, but Kobayashi is not offered. Spot stuff is now getting scarce.

MORPHINE.—Makers' price is unchanged at 4s. 9d. per oz. for muriate in powder.

MUSK is getting very scarce, and no new supplies are expected until April or May. For thin blue skin 67s. 6d. per oz. has been refused 70s. being wanted; for Pile III. 50s. has been paid, and for "Assam" grain 50s. is also wanted.

OIL, ALMOND.—B.P. quality is to be reduced to-morrow (Friday) to 1s. 4d. per lb.

OIL, ANISE STAR.—Business is said to have been done at 5s. 1½d. on the spot, and September-October shipment 4s. 6d., c.i.f.

OIL, CASSIA.—On the spot there are sellers at from 2s. 9d. to 3s. 4d. per lb. according to analysis, but little business is reported.

OIL, CASTOR.—Finest Calcutta oil (K B. brand) is very scarce, nothing being offered on spot or for forward delivery. The quotation for seconds is 3¼d. to 3½d. per lb.

OIL, COCOANUT.—Ceylon can be had at 29s. per cwt., but no Cochbin is obtainable on the spot, and none expected for some time.

OIL, COD-LIVER.—The position of the Bergen cod-liver oil market is unaltered, with a few small sales at the equivalent of 62s. per barrel, f.o.b., for finest non-congealing oil. The exports from Bergen to date amount to 843½ barrels, against 6,559 barrels at the corresponding period of last year.

OIL, PEPPERMINT.—For American HGH 8s. per lb. has been paid this week, but there are no further sellers at this figure; from New York 8s. 6d. to 8s. 7d. per lb., c.i.f., is asked, and reports are current that before the year closes prices will probably be near 10s. Japanese dementholised oil has also advanced again, Kobayashi brand being quoted 4s. 1½d. c.i.f.; and spot sales have been made at 4s., with 4s. 3d. now asked. Mitcham peppermint oil is quoted 25s. per lb.

OIL, PETROLEUM, has advanced $\frac{1}{4}d.$, American on the spot being quoted $6\frac{1}{4}d.$ to $6\frac{3}{4}d.$; and water-white $7\frac{1}{4}d.$ to $7\frac{3}{4}d.$ per gal. Russian is quoted $5\frac{3}{4}d.$ to $5\frac{5}{8}d.$ spot.

OPIMUM.—Quiet. Fine Tokat (soft-shipping) is in very small supply, and holders now ask 15s. 6d. to 15s. 9d. per lb. Fine Persian is offered at 11s. 6d. spot, but there is no demand.

SMYRNA, September 13.—The sales for the week amount to 48 cases, as follows:—Twenty-five cases old Karahissar talequale at the equivalent of 8s. 10d. to 8s. 11d. per lb., f.o.b.; 11 cases new Bogaditz talequale at 9s. 8d.; 7 cases new selected Karahissar at 9s. 1d.; 2 cases old Yerli talequale at 9s. 1d.; and 3 cases selected Yerli at 10s. 3d. The above prices show an advance on the Bogaditz and Yerli qualities, whereas old Karahissar manufacturing talequale remains unchanged. The market keeps firm, and may go higher if the present demand continues. The arrivals to date amount to 2,197 cases, against 2,821 cases.

SMYRNA, September 19.—With the exception of one buyer, who took 2 cases of selected Karahissar old crop at 9s. 2d., no business was done this week. Sellers, however, are very tenacious, and will not make any concessions; were they to do so there is a buyer who will take 20 to 25 cases Yerli at about 9s. 1d.

OTTO OF ROSE.—Advices from Kezanlik state that the "official" price has not yet been fixed. Meanwhile the market is very firm, and it is quite expected that prices will eventually be about 25 per cent. higher.

QUASSIA-WOOD is quoted 4l. 10s. per ton, and chips 11l. 10s., on the spot.

QUININE.—Few transactions are reported this week, and the market is very quiet, closing at 1s. 1d. per oz. nominally for spot or October delivery. Java cinchona shipped in September 1,180,000 Amst. lbs.

SAFFRON is unchanged, at 28s. 6d. per lb. net for best Valencia (B P. quality) and 27s. to 27s. 6d. for genuine. No information concerning new crop can be given until after the first week in October.

SEEDS.—Russian *Anise* is dearer, 21s. 6d. to 22s. 6d. per cwt., c.i.f. terms, being asked for shipment; Spanish is also very dear at 40s. c.i.f.; the crop is reported to be the smallest on record. *Canary* is dearer to arrive for Turkish, 32s. c.i.f. being the latest quotation. A good business is doing on the spot at firm prices. Other seeds are slow, and show no change from last quotations.

SENEGA.—A small business has been done this week at 2s. 1d. per lb. net, spot, but 2s. 3d. is now the price both for spot and c.i.f.

SHELLAC.—The market last week closed strong with a good business both for spot and future delivery at higher prices, and since then a further important rise has been established owing to an advance in the Calcutta price of TN to 45 rupees. On the spot (previous to auction) second orange TN sold at from 77s. to 80s., according to quality. In "futures" several thousand cases have changed hands, including October delivery, at from 80s. 6d. to 84s.; November, at 81s. 6d. to 84s.; December, 84s. 6d.; January, 81s. 6d. to 85s.; and March, at 83s. for TN. For arrival TN has been sold at 82s. to 83s., c.i.f., for October-December shipment, and 84s. to 84s. 6d., c.i.f. Continent. At auction about 400 cases offered, of which 280 sold at an advance of 3s., fair TN being now quoted 81s. to 82s. The following prices were paid:—Second orange, middling, part cakey to fair reddish, 80s. to 81s.; ordinary red part blocky, 79s.; and common red liver, 76s. Button (partly without reserve), blocky firsts, 78s.; fair to good seconds, 76s. to 80s.; fair circle 2s, at 73s.; common weak, 67s.; and resinous thirds, 65s. per cwt.

SPICES.—The principal change to note this week is a rise in the price of pimento, which is about $\frac{1}{4}d.$ per lb. dearer. The demand for Cochin *Ginger* at the public sales held on Wednesday was slow, only a few cases of bold cut selling at 86s. per cwt.; the bulk was bought in at 90s. to 95s. for bold cut, at 55s. to 60s. for good small and medium mixed small, at 52s. 6d. for small cut, at 42s. for washed rough, and at 40s. for Calicut brown rough. Zanzibar *Cloves* have recovered to $3\frac{3}{4}d.$ per lb. for January-March delivery with a fair business passing. *Pimento* is dearer, nearly all the parcels offered sold at $3\frac{3}{4}d.$ per lb. for ordinary quality, and at $3\frac{1}{4}d.$ for good. Nyassaland *Chillies* sold with good competition at 50s. to 59s. per cwt. for good to fine bright red picked, and

mixed dark at 46s. to 46s. 6d. *Cinnamon-featherings* were held for 8d. per lb., and bark was bought in at $1\frac{1}{4}d.$ per lb. as also was wild quill. Trang black *Pepper* was bought in at $6\frac{1}{4}d.$ per lb., and Wynaad at the same price. Singapore is selling privately at $6\frac{1}{4}d.$ on the spot, and for September-November shipment at $6\frac{3}{16}d.$ Singapore white was bought in at $9\frac{1}{8}d.$ to $9\frac{3}{8}d.$ per lb., but $9\frac{3}{8}d.$ has been paid for future shipment. Penang to arrive is quoted $8\frac{1}{4}d.$ to $8\frac{3}{8}d.$ per lb.; and on the spot $8\frac{5}{8}d.$ to $8\frac{3}{4}d.$ per lb.

TURMERIC.—In auction, 591 bags Madras offered, and 21 only sold, including bright whole bulbs at 17s. 3d. Privately Cochin is dearer, with sales of split bulbs at 8s. 6d. per cwt. This description is very scarce, and higher prices are now asked. Several hundred bags Madras have been also sold privately at from 23s. to 25s. per cwt., according to quality.

VANILLA.—At the auctions on Friday the record quantity of 1,530 tins was offered, and holders being willing to meet the market, the bulk was disposed of at a decline of 2s. to 4s. per lb. Good to fine chocolate, Seychelles, &c., sold at from 18s. to 24s. for $7\frac{1}{2}$ inches to 8 $\frac{1}{2}$ inches, 12s. 6d. to 16s. 6d. for $6\frac{1}{2}$ inches to 7 inches, 8s. 6d. to 13s. 6d. for 5 inches to 6 inches, and 7s. 6d. to 12s. 6d. for 2 inches to 5 inches; common and foxy sold at from 5s. up to 11s. 6d. per lb.

London Drug-auctions.

At the auctions of first-hand goods to-day there was a slow demand. Cape aloes was 1s. 6d. dearer. Sumatra benzoin was easier, and buchu-leaves were neglected. Cardamoms of fine quality were easier, but medium grades sold at full prices. Ipecacuanha was in more demand, at steady rates. Senna sold well at very high prices, especially for fine quality, which was scarce. Jamaica was in small supply and 5s. dearer, and Madagascar was in good demand. The following table shows the quantity of goods offered and sold, those marked * privately:—

	Offered	Sold		Offered	Sold
Aloes—			Oil—		
Cape	33	18	citronella	7	0
Socotrine	10	10	castor (E.I.)	50	0
Ambergris	2	1	cinnamon-leaf ...	8	0
Benzoin—			eucalyptus	39	0
Sumatra	94	24	lime (W.I.)	23	13
Buchu	28	0	Quince-seed	2	2
Calumba	304	62	Rhubarb	9	0
Cardamoms	222	174	Saffron	1	0
Cascara sagrada ...	100	0	Sandalwood	7	0
Cinchona	3	3	Sarsaparilla	8	8
Coca-leaves	65	0	Seedlac	20	20
Dill-seed	98	98	Senna—		
Dragon's-blood	5	1	Alexandrian	35	0
Elemi	10	10*	Tinnevely	746	746
Ergot	42	0	Squills	18	0
Gamboge	10	0	Tamarinds—		
Gum acacia	113	0	(E.I.)	115	0
Gum acrooides			Thyme seed	25	0
(tons)	10	0	Turmeric	196	0
Gum Senegal	1	0	Valerian (Jap.) ...	15	0
Honey (Calif.)	50	0	Vanilla	6	0
Jamaica	36	23	Wax (bees)—		
Ipecacuanha—			Australian	14	8
(Cartagena)	17	0	Calcutta	46	0
Rio	61	18	Jamaica	6	6
Kino	10	0	Madagascar	410	308
Kola	10	0	Morocco	9	0
Irish moss	2	0	Spanish	19	0
Musk	2	1*	Zanzibar	103	37
Myrrh	14	0			

ALOES.—Cape advanced 1s. 6d. per cwt. compared with the last public sales, 35s. being paid for fair hard but rather dark aloes. Fair seconds sold at 25s. 6d. to 26s., and common drossy ditto at 22s. per cwt. Of Socotrine aloes in kegs 10 packages apparently sold at 75s. for good bright pasty.

AMBERGRIS.—A tin from New Zealand containing a lump weighing $4\frac{1}{2}$ oz. sold at 85s. per oz.

BENZOIN.—Sumatra sold at easier rates, 7l. per cwt. being paid for good fair seconds and 6l. 12s. 6d. for fair ditto.

BUCHU.—Neglected in auction. Fair round green leaf was obtainable at $11\frac{1}{2}d.$ per lb., and probably 11d. would have been accepted for a string of 28 bales.

CALUMBA.—Two parcels of 127 packages did not arrive in time for auction; 42 bags of dull and lean stemmy sorts

sold at 8s. 3d. per cwt., and for 20 bags from another catalogue 14s. was paid for small to bold, natural sorts part wormy.

CARDAMOMS.—Fine qualities of Mysore were about 2d. per lb. lower, but medium grades brought full prices. The following rates were paid:—Ceylon-Mysore, good pale bold to extra bold, 3s. 1d. to 3s. 4d. per lb.; extra bold dullish, 2s. 7d. to 2s. 9d.; bold medium pale, 2s. 7d.; small and medium pale, 2s. to 2s. 4d.; small pale, 1s. 8d. to 1s. 11d.; medium long brownish, 1s. 10d.; small ditto, 1s. 5d.; and medium specky, 1s. 5d. Brown splits and pickings, 1s. 4d. to 1s. 5d. Seeds sold at from 2s. 2d. to 2s. 4d. per lb. Of Ceylon-Malabars, 18 cases of small and medium brown were shown, and for these 1s. 10d. was wanted; 21 cases of Mysore were withdrawn, it being intimated that they were to be re-shipped to Bombay.

CASCARA SAGRADA.—For 1900 crop 26s. was wanted, and for 1899 crop 28s. 6d., per cwt. Privately the market is firm at these figures.

DILL-SEED.—A parcel from Bombay sold at 12s. per cwt.

DRAGON'S BLOOD.—Privately there has been a good business this week, about a ton changing hands for export at from 10l. to 10l. 10s. for fine native-picked lump. There is now very little of this grade left. In auction 2 cases of this description were shown, and bought in at 11l., and a case of middling lump sold at 8l. per cwt.

ELEMI.—Ten cases of good Manilla gum had been sold privately.

ERGOT.—In auction no business was done. For 6 cases of fine bold new crop Spanish a bid of 1s. 10d. was apparently refused. There was plenty on offer from other catalogues at 1s. 10d. per lb. Privately 1s. 6d. per lb., c.i.f., is quoted for ton-lots of Spanish.

GAMBOGE.—For blocky and unsorted pipe of mostly good orange fracture 11l. per cwt. was refused, the parcel being bought in at 12l.

HONEY.—In small supply. Dark syrupy Jamaica, in casks, sold at 17s., and cases at 17s. 6d. to 18s. 6d. per cwt. Dark reddish liquid, in casks, realised 16s. 6d.

IPECACUANHA.—Slightly more demand was shown in auction for Rio root at practically unchanged prices. A few good bright bales sold at 11s. 3d. to 11s. 4d., and fair average lean 11s. 2d. per lb. Two bales of sea-damaged sold at 11s. Of 14 bales offered by a third broker, 6 sold at 10s. 10d. per lb. for fair clean but thin root. No Cartagena root sold, buyers being frightened by the higher prices asked—viz., 6s. 6d. to 7s. per lb.

OIL, CINNAMON-LEAF.—Eight cases were held at 1½d. per oz.

OIL, CITRONELLA.—For commercial quality in drums 9½d. per lb. was asked, and for fine in bottles in cases 1s. 2d. per lb.

OIL, LIME, was about 2d. per lb. lower compared with the last prices paid in auction, 13 cases of West Indian distilled changing hands at 1s. 6d. to 1s. 7d. per lb.

QUINCE-SEED.—For fair quality from the Cape 1s. 1d. per lb. was paid, and for slightly damaged ditto 10d. per lb. Slightly mouldy Cape sold at 1s. 1d. per lb., and damaged at 10d.

SARSAPARILLA.—The offerings were confined to Lima-Jamaica description, of which 8 bales country-damaged sold cheaply at from 10d. to 1s. per lb.

SEEDLAC.—A parcel of 20 bags from Madras sold at 61s. per cwt.

SENNA.—Tinnevely leaf was in excellent demand, principally for export, and as fine quality was scarce and wanted, very high prices were paid for it in auction. The following prices were realised:—Fair to good bold green Tinnevely leaf, 4½d. to 5½d.; medium and fair greenish, 2½d. to 3½d.; and ordinary yellowish to middling specky leaf, 1d. to 2½d. per lb. Pods sold at from 1½d. to 2½d. for fair to good. No Alexandrian leaf sold. For siftings a bid of 2½d. was

refused, 2½d. being wanted. The s.s. *Arabia* is due shortly with 460 bales Tinnevely senna.

WAX, BEES.—Jamaica was in small supply to-day, and sold readily at 5s. per cwt., higher rates compared with last public sales. For the 6 packages offered 7l. 15s. was paid. Madagascar was also in good demand, and a larger quantity than usual changed hands at from 6l. 5s. to 6l. 10s. per cwt. for pale to dark-brown, and for very dark 6l. 7s. 6d., and wormy 6l. to 6l. 5s. Good hard brown Zarzibar realised 6l. 10s., and low and wormy 5l. 10s. to 5l. 15s. Eight bags of pale grey and brown Australian sold at 7l.

Proposed German Customs Regulations.

It is reported from Leipzig that the Reichstag will pass a law compelling American exporters to Germany to make out invoices covering the shipments, these invoices to be authenticated by the German consul in the United States in whose districts the goods were produced. It is alleged that such a course will help the officials in perfecting the statistics of the imports from the United States, and will also throw another obstacle in the way of American exports to Germany.

London Shipping Dues.

An influential deputation of shipowners is to wait on the Dock Company to protest against the proposed enormous rise in shipping dues. It is felt that when the latter body are made aware of the serious effect which the suggested increase will have on the trade of the port, their ideas as to the practicability of the proposal will be considerably modified. The present dues were arranged on a competitive basis, and, having in view the manner in which the shipping business is transferred from port to port at the present day, considerable doubt is raised as to whether the increasing of the rates at this juncture will really add a penny of revenue to the Dock Company's exchequer. At the same time, there are many shipping concerns which are absolutely compelled to stick to London, and they will have to pay the extra charges no matter how much cheaper are the rates at other ports. The new tariff does not come into operation before January 1, 1902.

Java Government Cinchona.

From the report on the Government cinchona-plantations in Java for the three months ending March 31, 1901, we learn that the climatic conditions were somewhat unfavourable; the rainfall was much below the average, whilst heavy gales, about the middle of February, did a very considerable amount of damage to the plantations. These gales were mostly local, and of a cyclonic character, and the extent of the damage is shown by the fact that nearly 4,000 trees were blown down, from which over 200 tons of wet bark (equal to about 70 tons of dry bark) were collected. Numerous buildings were also more or less severely damaged. During the height of the stormy season the bulk of the native labourers, some 500 men, left the plantations, which caused great difficulty and much delay in gathering the bark of the uprooted trees.

With the exception of some damage done by a caterpillar (*Euproctis flexuosa*), the depredations by insect-pests were inconsiderable.

Further experiments made with a view of ascertaining whether the content of alkaloid varies with the climatic conditions, and whether it is greater in one particular month than in any other, have led to no definite results.

The plants in the nurseries numbered 1,560,000, of which 1,428,000 were *Ledgeriana* and 132,000 *Succirubra*. In the open ground the total amounted to 2,641,500—viz., 1,800,000 *Ledgeriana*, 433,500 hybrids, 362,000 *Succirubra*, and 46,000 *Officinalis*.

THE FIRST EGYPTIAN MEDICAL CONGRESS is to be held on December 14 to 20, 1902, in Cairo, and will be specially devoted to Egyptian diseases and epidemics.

CHEMISTS' ASSISTANTS' UNION.—The following officers have been elected at a Council-meeting held on September 25:—President (*pro tem.*), Mr. C. E. Pickering; Vice-Presidents, Messrs. W. C. Softley, T. H. Hanbury Francis, and S. P. Sayers; Assistant Secretary, Mr. F. R. Patterson Holt; Hon. Treasurer, Mr. R. E. Wright; members of committee, Messrs. Coke, Pearson, Mackenzie, Frigelow, Jones, Smith, Smart, Rawlings, and Wilkinson. Hon. Secretary, Mr. J. G. Middleton, 20 Streatham Hill, S.W. The programme for October is as follows: October 2, discussion on proposed amalgamation with Chemists' Managers' Association; October 16, smoking-concert; October 30, "Salaries," by Mr. C. E. Pickering.



IRISH SUPPLEMENT TO THE CHEMIST AND DRUGGIST

FIFTH YEAR.

SATURDAY, OCTOBER 5, 1901.

No. 58.

Review of the Month.

THE Educational Number of THE CHEMIST AND DRUGGIST, published on September 7, gives particulars of the pharmaceutical, medical, veterinary, dental, and science examinations of Great Britain and Ireland. The information as to obtaining the qualifications for practising pharmacy in Ireland are epitomised and notes given on the schools of chemistry in Ireland where suitable instruction is obtainable. Mr. A. T. Ferrall, 67 Lower Mount Street, Dublin, supplies the official schedule of examination subjects free on application. The session of the Society's school commences this month.

* * * *

A REPORT of the final meeting of the Dublin Reception Committee of the British Pharmaceutical Conference is given on page 76. From this it will be seen that the accounts balanced in a satisfactory manner, the deficit of 4*l.* being wiped off at the meeting. We also give reports of the meetings of the Executive and Formulary Committees in London. The pharmacists of Dublin and district are to be heartily congratulated on the thorough success that has crowned their efforts in connection with the recent Conference.

* * * *

At the September Council-meeting of the Pharmaceutical Society of Ireland a letter of resignation from Mr. W. F. Wells was received. It was resolved to ask Mr. Wells to reconsider his decision, but we hear that he is not prepared to continue service as a councillor of the Society. A report of the Council-meeting and some notes on Mr. Wells's career are given on page 75. There are four nominations for the three vacancies on the Council caused by the retirement of Messrs. Wells, Montgomery, and Brittain, which will be filled by vote of the members, to be announced at the annual meeting on October 7.

* * * *

The Corporation of the City of Dublin, as the result of examining samples of spirit of nitrous ether obtained from chemists, have prosecuted Messrs. J. Leonard & Co. and Mr. W. H. Gamble, pharmaceutical chemist, for selling the spirit deficient in nitrous ether. In the case of Messrs. Leonard, the reserve sample was sent to the Government Laboratory in London, and the Principal reported the sample had evaporated, due to bad corking, and that it was impossible to make a report on it. The summons was accordingly dismissed. In Mr. Gamble's case it was pleaded that repeated opening of the stock-bottle had caused

deterioration, but a fine of 1*l.* was imposed. Full reports of these cases are given in the *C. & D.* for August 17, September 14, and September 21. The spirit should be stored in amber-coloured bottles, as pointed out by Harvey in THE CHEMIST AND DRUGGIST, direct sunlight being fatal to effective storage. These results, it will be remembered, were confirmed in a paper by Farr and Wright, read before the recent Conference in Dublin.

* * * *

THE annual meeting of the British Association for the Advancement of Science has been held during September in Glasgow. Professor A. W. Rücker took as the subject of his presidential address the theory of atoms. The atomic theory has lately had doubts cast on it by eminent scientists, but Professor Rücker gave his audience proofs that the theory was neither a convenient fiction nor a gigantic aid to memory for producing apparent order out of disorder by codifying observed facts and laws. The address was summed up with the following sentence: "The atomic theory must hold the field until another can be found which is not inferior as an explanation of the fundamental difficulties as to the constitution of matter and is at the same time not less comprehensive."

* * * *

IN Great Britain there is much difficulty in obtaining apprentices to the drug-trade, and a correspondence on the subject which has been initiated in the *C. & D.* shows that the matter is a very serious one. The increased stringency of the Entrance and Qualifying examinations is thought to be accountable for the extraordinary diminution in the number of entrants. Other reasons are probably the effect on the trade of the cutting evil and the long hours of service required. Retailers are finding great difficulty already in obtaining qualified assistants, and public appointments are being filled by men who hold qualifications inferior to the Minor. As far as we can gather from the large quantity of correspondence we have received on the matter, the dearth of apprentices has not extended to Ireland.

* * * *

STUDENTS should note that the annual analytical tournament carried on in connection with the Corner for Students will commence with the next mixture of salts. The competition is open to all pharmacy students in Great Britain and Ireland, and is one of the best means of testing proficiency in practical chemistry. Ireland has furnished many prize-winners during the many years the "Corner" has been conducted, first by Mr. R. J. Moss, of Dublin, now by Dr. Dobbin, who is of Belfast origin.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE Council met at 67 Lower Mount Street, Dublin, on Wednesday, September 4, at 3 o'clock, the President (Mr. George D. Beggs) in the chair. The other members present were Messrs. W. Jameson and J. Tate (Belfast); P. White (Sligo); Thomas Batt; R. Simpson, G. Grindley (Hon. Treasurer), Brown, T. N. Moffitt, P. Kelly and Professor Tichborne (Dublin).

COUNCILLORS' ATTENDANCE.

The first item on the agenda paper was the following notice of motion which had been given by the Vice-President, Mr. J. I. Bernard:—

That, on any member of the Council absenting himself from four regular consecutive monthly meetings, such member shall become disqualified, and the Registrar shall place on the agenda of the next meeting a notice to co-opt another member of the Society to fill the vacancy thus created.

The PRESIDENT said he had received a telegram on the matter from Mr. Baxter which the Registrar read.

It stated that a severe attack of bronchitis prevented the writer from attending, and that he thought the notice of motion ought to be withdrawn, as, if it were acted on, the Council might be deprived of the services of some of its worthiest members.

The PRESIDENT said that when the Vice-President first spoke to him about the notice he was under the impression that it was admissible; but on subsequently looking into the Act of Parliament he found that there was nothing whatever in it to authorise their interference with the three years term of office of any member of the Council on the ground of non-attendance. He must therefore rule the notice of motion out of order.

Mr. JAMESON: I think the conclusion you have come to, Mr. President, is the correct one.

Mr. GRINDLEY: Every member of the Council is elected for three years. No doubt it has been found difficult to get quorums, but the course proposed by the notice is not the right way of correcting the evil.

The PRESIDENT: I must say that the origin of it was that we had several abortive meetings, and we wanted to try to secure quorums.

Mr. BATT: You said something last night about changing the hour for the Council-meetings. It might be better for the city members if we met in the morning. The present hour is very inconvenient for me.

PRESIDENT: What is the opinion of the country members? Would 11 or 12 o'clock suit them?

Mr. TATE: said it would be rather inconvenient to have to come from Belfast by a very early train in the winter, but he would gladly fall in with any suggestion from the other members of Council who had to come from the North. It was very inconvenient for the Northern members to attend the Council-meetings sometimes. He had been absent for a considerable time, but his absence could be easily explained. The question was, What hour would suit everybody?

The PRESIDENT: I do not know what the feeling of all the city members is on the matter, but we wish to suit the convenience of the country members as well. I can make it my business to attend the Council-meetings at any hour suitable to the Council.

Mr. KELLY: Perhaps the Northern members could arrange to send up two members periodically.

Mr. JAMESON: We must lose an entire day, no matter how it is.

Mr. WHITE: If the meetings were held at 12 o'clock I should have to get up at 4 o'clock in the morning in order to attend them.

The PRESIDENT: The Act names 3 o'clock as the hour, and we should have to go to the Privy Council in order to make a change. Is it your wish that the hour of meeting be changed to 12 o'clock?

Mr. GRINDLEY: Do not come to any decision now. Let this discussion go forward. It would be unfair to make any change without consulting all the members of the Council.

Professor TICHBORNE: A proposal of so much importance should go on the agenda-paper.

ENFORCING THE POISONS ACT.

The PRESIDENT, referring to the deputation which waited on the Inspector-General of the Royal Irish Constabulary to ask the assistance of his force in carrying out the Poisons Act, said they were received very courteously; but the Inspector-General wanted the Council to formulate their ideas as to what was to be done, and to give a list of the articles that contained poisons.

Mr. KELLY: Do the Constabulary get onr "Calendar"?

The REGISTRAR said 600 copies of it had been supplied to them.

The PRESIDENT referred to Section 16 of the Pharmacy Act (Ireland) Amendment Act, which provides that in January of each year a copy of the registers of pharmaceutical chemists, chemists and druggists, and registered druggists shall be sent to the inspector of weights and measures in each constabulary district of Ireland; and that it shall be the duty of such inspector to report to the Council any offences against the Pharmacy and Poisons Acts. Headed: "If a list of articles containing poisons is to be supplied to the Constabulary the Law Committee should prepare it."

MEDALS.

It was announced that the answering at the Licence examinations had not been good enough to entitle any candidate to a gold medal; but that a silver medal would be awarded to Mr. John Ronald Wilson, who had obtained the highest number of marks—viz, 234—being 4 marks over the limit for a silver medal.

APPOINTMENTS AND ELECTIONS.

On the motion of the PRESIDENT, seconded by Mr. Brown, Mr. T. J. English and Mr. W. B. Conyngham, both of Dublin, and Mr. J. W. Harvey, Cork, were elected members of the Society.

On the motion of Mr. MOFFITT, seconded by Mr. BROWN, Mr. C. McCann, of Belfast, was elected a member.

The PRESIDENT moved that Mr. A. Forbes Watson be re-elected examiner in chemistry—Mr. Watson had given universal satisfaction.

The motion was seconded and unanimously passed.

Messrs. Simpson and Batt were appointed scrutineers of the ballot for the election of members at the annual meeting in October.

MR. WELLS RESIGNS.

The PRESIDENT said a letter of resignation had been received from one of their best members, Mr. W. F. Wells. Two or three members of the Council had already pressed him to remain with them; but up to the present he did not see his way to do so. He (the President) thought a letter should be sent to him from the Council, asking him to reconsider his decision. The President then read and moved the adoption by the Council of a draft letter which stated that they had heard with profound regret of Mr. Wells' contemplated retirement from their body; that they were fully alive to the deep interest he had always taken in the affairs of the Society, and to the valuable assistance that he had always rendered to the Council; and that they earnestly trusted that he would allow his name to go forward for re-election.

Professor TICHBORNE seconded the adoption of the draft letter. He said Mr. Wells was one of the most energetic members they had ever had, and his retirement from the Council would be a serious loss.

Mr. BROWN supported the motion. No man, he remarked, better understood the affairs of the Society and of the Council than Mr. Wells, and though some of them might not always agree with him they all appreciated his energy and intelligence.

The draft letter was unanimously adopted.

RECIPROCITY.

A correspondence was received from the Colonial Office in reference to the privileges accorded to Irish Pharmaceutical licentiates in the colonies. It included the following circular which Mr. Chamberlain issued to the colonial Administrators in April, 1900:—

SIR,—I have the honour to inform you that my attention has been called to the fact that in various British colonies privileges

which are accorded to British pharmacists are not extended to Irish pharmacists. I am not aware of any justification for this discrimination. It appears, indeed, to have had its origin in the overlooking of the fact that the Imperial Pharmacy Act of 1868 applies only to Great Britain, separate provision being made for Ireland by the Pharmacy (Ireland) Act, 1875, and the Pharmacy Act (Ireland) Amendment Act, 1890. Should the Pharmacy Law of any of the colonies under your government not treat Irish pharmacists as equally entitled to recognition with British pharmacists, I shall be glad if, when any modification of it is under consideration, the claims of Irish pharmacists to equal privileges can be borne in mind.

Accompanying this circular was a letter from the Colonial Office stating that it did not appear from the replies received to the circular that any discrimination in the laws relating to the practice of pharmacy was made between British and Irish pharmacists in the following colonies:—Canada, Victoria, Queensland, New Zealand, Fiji, the Bahamas, Jamaica, Trinidad, Barbadoes, Grenada, St. Vincent, St. Lucia, the Leeward Islands, the Cape of Good Hope, Southern Rhodesia, Natal, Sierra Leone, Gambia, Malta, Mauritius, the Seychelles, and the Straits Settlements. As to New South Wales, South Australia, and Tasmania, the Governments of those colonies were prepared, the letter stated, to enter into reciprocal arrangements with the Pharmaceutical Society of Ireland for the mutual recognition of certificates. It did not appear that Bermuda, British New Guinea, the Falkland Islands, Ceylon, and Hong-Kong had any laws relating to the qualifications of pharmaceutical chemists; whilst in Cyprus, the Gold Coast, and Lagos the laws did not distinguish between Irish and British pharmaceutical chemists.

The PRESIDENT: I think these letters are very satisfactory, and I suggest that we should thank Mr. Chamberlain for them.

The Registrar was directed to write a letter of thanks to Mr. Chamberlain.

The Council then adjourned.

Mr. Wells has since intimated that he is unwilling to reconsider his decision, so that Irish pharmacy loses—let us



MR. W. F. WELLS.

probably unequalled. Mr. Wells was admitted a member of the Society after passing the Licence examination in 1877, and, after a short period of Vice-Presidency, became President in 1895, a position he retained for two years. It was during his Vice-Presidency in 1890 that the Pharmacy Act Amendment Act passed through the Houses of Parliament. Mr. Wells was one of the deputation of three sent to do lobby-work in London, and his persistence with members of Parliament had not a little to do with the successful passing of the measure. At the annual meeting of the Pharmaceutical Society of Ireland in October, 1890, an address was presented to Mr. Wells for his services, in which the members and licentiates of the Pharmaceutical Society of Ireland expressed their high appreciation of the very valuable services rendered to the cause of pharmacy in Ireland by securing through his energy and zeal the passing of the Act. The address also expressed the hope that under the new constitution Mr. Wells would be able to assist by his continued counsels to consolidate and perfect the work he had assisted in accomplishing. His services in this respect and to Irish pharmacy in general were further recognised in 1898 by the presentation to him of a handsome rose-leaf hawl and framed list of subscribers. The late Mr. R. J. Downes, in making the presentation, recalled his earliest recollections of Mr. Wells, Mr. Downes having been an apprentice with Mr. Wells's father. The following sentence from Mr. Downes's speech at the presentation is characteristic of the good things said of Mr. Wells at the meeting:—

Since passing his examination he had been in the forefront of all their legal battles, which he fought and won nobly. He was not always right, but he generally managed to carry the day. Some time ago he (Mr. Downes) and Mr. Wells were opponents on matters pharmaceutical, but they were now pulling together in harness, and would continue to do so. He had received a number of letters from all parts expressing the admiration in which Mr. Wells was held by the craft, and the only regret felt by the licentiates was that the movement to present Mr. Wells with a testimonial was not made more general, in which case the bowl would probably have been as large again as it was. When started it was thought that the testimonial would not have been one-fifth of its value, but it showed the esteem and respect in which Mr. Wells was held when the movement, started so spontaneously, was subscribed to the full in the course of a few days.

Mr. Wells's services as Chairman of the Local Committee of the British Pharmaceutical Conference at the recent meeting in Dublin are still fresh in the minds of our readers, and a description of his pharmacy in the *C. & D.*, July 27, renders it unnecessary for us to further enlarge on a career which friends and opponents alike admit has been of inestimable service to Irish pharmacy.

COUNCIL VACANCIES.

The following nominations have been made for the three vacancies occurring on the Council of the Pharmaceutical Society of Ireland through Messrs. Wells, Montgomery, and Britain not seeking re-election:—

Richard Blair, M.P.S.I., Patrick Street, Cork. Proposed by the President and seconded by the Vice-President.

Mr. H. V. Golden, of Birr, King's Co. Proposed by the Vice-President, seconded by the President.

Mr. John Smith, M.P.S.I., Terenure, Dublin. Proposed by the President, seconded by the Vice-President.

Mr. T. J. English, M.P.S.I., Rathgar. Proposed by Mr. Wells, seconded by Mr. O'Sullivan.

Messrs. Blair and Golden as representing the provinces (at present unrepresented) would largely help in widening the interests of the Society, and Mr. Smith, who has lately completed the usual term of five years as an examiner of the Society, is thoroughly versed in Society work, being an active member for many years. Mr. English is also a well-known pharmacist, and assisted very much in the arrangements for the Dublin visit of the British Pharmaceutical Conference. The members of the Council who retire by rotation and seek re-election are Messrs. G. H. Grindley (Dublin), P. Kelly (Dublin), G. Brown (Dublin), and James Tate (Belfast).

hope only temporarily—the services on the Council of one of its members whose knowledge of the Irish Pharmacy Act is

British Pharmaceutical Conference.

THE final meeting of the Dublin Reception Committee of the British Pharmaceutical Conference was held on September 3 at 67 Lower Mount Street, Dublin, for the purpose of submitting the auditors' report and statement of accounts.

Mr. S. P. Boyd (Vice-Chairman) occupied the chair, in the absence of Mr. W. F. Wells. There were also present: G. D. Beggs, M.P.S.I., Professor Tichborne, P. Kelly, M.P.S.I., John Smith, M.P.S.I., G. H. Grindley, M.P.S.I., H. V. Golden, M.P.S.I., A. L. Doran, M.P.S.I., Thos. White, Frank J. Gill, Sir Thos. Robinson, J.P., David O'Sullivan, M.P.S.I., Robt. Simpson, M.P.S.I., George Brown, M.P.S.I., Dr. J. A. Walsh, M.P.S.I., and J. I. Bernard, M.P.S.I., whilst numerous apologies for absence were received.

The balance-sheet, as certified by Messrs. Simpson, Grindley, and Sir Thos. Robinson, showed that after the outstanding subscriptions (some 10*l.*) had been paid the deficit amounted to under 4*l.* On the motion of Professor Tichborne, seconded by Mr. Thomas White, the balance-sheet was adopted and passed unanimously, and cheques ordered to be drawn to pay all accounts, the deficiency being at once provided for by those present.

Votes of thanks were then passed to the following:—The Lord and Lady Mayoress, the Secretary to the Lord Mayor (Mr. O'Neill), Judge Overend (Dalkey), Colonel Plunkett (Science and Art Museum), Mr. and Mrs. S. P. Boyd (for the garden-party), Ladies' Committee, Chairman (Mr. Wells), Vice-Chairman (Mr. Boyd), Hon. Treasurer (Mr. Beggs), Hon. Secretary (Mr. Bernard), Messrs. Gill and White (Catering Committee), Messrs. Smith and English (Conveyance Committee), the Auditors, the Pharmaceutical Society of Ireland (for use of rooms), and the Press.

The meeting terminated after a cordial vote of thanks had been passed to the Vice-Chairman (Mr. S. P. Boyd).

A MEETING of the Formulary Committee was held at 17 Bloomsbury Square, W.C., on September 18, at 5.30 p.m. Present: Mr. N. H. Martin, who presided, Messrs. G. C. Druce, F. Ransom, Harold Wilson, F. C. J. Bird, and W. A. H. Naylor. The minutes of the previous meeting were read and confirmed. On the motion of Mr. Harold Wilson, seconded by Mr. Bird, Mr. Martin was heartily thanked for his services during the past year, and asked to continue to act as Chairman of the Committee. Mr. Martin consented, and expressed the hope that the members would accord him the measure of support they had hitherto so freely given. Mr. Naylor was re-elected Secretary. The Chairman made a brief reference to the favourable comments passed by the Press on the recently published "Formulary," and to the encouraging rate at which the volume had sold. The Secretary stated that the sale of copies by the third week in August had reached over 1,300, and that the printers had been instructed to supply an additional 500 at once. As the result of a discussion on the means to be used for collecting material likely to be of service in a future edition of the "Formulary," it was decided to ask a number of pharmacists to say what preparations, B.P. excepted, are most in demand, as shown by their prescription-books.

A meeting of the Executive Committee was held at 17 Bloomsbury Square, W.C., on September 18. Present: Mr. G. Claridge Druce (President, in the chair), Dr. Attfield, Messrs. N. H. Martin, E. M. Holmes, and W. A. H. Naylor (Vice-Presidents), Mr. J. C. Umney (Hon. Treasurer), Professor Greenish, Messrs. Atkinson, Collier, O. Tyrer, and E. White, Messrs. Ransom and Peck (Hon. General Secretaries), and Mr. Hearn (Assistant Secretary). Letters of apology for absence were received from Messrs. G. T. W. Newsholme, S. R. Atkins, E. H. Farr, O. Kerr, J. I. Bernard, W. Cummings, G. D. Beggs, W. F. Wells, and J. O. C. Payne.

A letter from Professor J. P. Remington, Chairman of the Committee of Revision of the Pharmacopœia of the United States of America, was read, acknowledging the receipt of a vote of condolence upon the death of Dr. Charles Rice, in which he said: "The loss of this eminent scientist, chemist, pharmacist, and scholar will be severely felt, not only in English-speaking countries, but throughout the world. Per-

mit me, in the name of the Committee of Revision, to again assure you of its deep sense of appreciation of the kindly feeling which prompted the sending of the letter."

The President congratulated the Conference upon the most successful meeting recently held in Dublin.

Dr. Attfield proposed, and Mr. Naylor seconded, that "the Committee of Publication be not reappointed." This was carried. Mr. Martin proposed, and Mr. Holmes seconded, that the Hon. General Secretaries be appointed editors of the "Transactions of the Conference" for insertion in the *Year-book*. Carried.

The following were elected honorary members of the Conference:—Professor A. B. Prescott, University of Michigan, U.S.A.; Dr. David Prain, Director of Botanical Survey, Calcutta; Professor A. Ladenburg, University of Breslau, Germany; Mr. J. H. Maiden, Director of Botanic Gardens, Sydney; and Mr. O. R. Blackett, President of Pharmacy Board, Melbourne.

Dr. Attfield read a letter he had received from Mr. Alfred Siebold, telling of the death of Mr. Louis Siebold, late Editor of the *Year-book*. It was unanimously resolved to send a letter of condolence to the family, at the same time expressing the Committee's deep sense of appreciation of his long and valued services.

The election of new members concluded the business.

[The death of Mr. Louis Siebold occurred at Broomville Avenue, Sale, on September 14. Mr. Siebold was a Fellow of the Chemical Society and of the Institute of Chemistry, as well as a chemist and druggist. He was appointed Editor of the *Year-book of Pharmacy* in 1874, and resigned the position owing to ill-health at the beginning of this year.]

Death.

GARDINER.—We regret to record the death of Mr. John Alexander Gardiner, chemist and druggist, which took place at 43 Kenilworth Square, Dublin, on September 17. Mr. Gardiner, who was 51 years of age, was born at Dunmurray, Belfast, and obtained his first experience of the drug-

trade in Sir James Haslitt's business there. He went to Dublin in 1871, and entered the establishment of Messrs. Boileau & Boyd as a junior. His business capacity was such that he progressed from one position to another until he got a partnership in the firm, all the while travelling over the country in its interests. Some years ago the firm was converted into a limited company, when the three businesses of Boileau & Boyd, Samuel Boyd (Mary Street), and Boyd & Goodwin (Merrion Row) were amalgamated, and he became a director. He was an active member of the Masonic order, and also held office in the Abercorn Knights Templars Preceptory. He was highly esteemed by the drug-trade throughout Ireland, and his comparatively sudden death (he was only ailing a week) is much regretted. The funeral took place at Mount Jerome Cemetery on September 21, the *cortège* being of an imposing and representative character. Amongst those present were the directors of Boileau & Boyd (Limited), Mr. G. D. Beggs (President of the Pharmaceutical Society of Ireland), Mr. J. I. Bernard (Vice-President), and many other pharmacists and drug-trade representatives, besides Dublin medical practitioners and Messrs. Boileau & Boyd's staff.

In connection with Mr. Gardiner's death, Messrs. Boileau & Boyd have issued a circular in which they say: "For thirty years he has faithfully and honourably served our firm, rising from a junior position in the house to be one of the directors. It will be difficult to fill his place, but at an early date our representative, Mr. Hugh Alderdice, will take up the journey."



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 CC. Cases of 100 pieces, Toilet shapes, £3 15s., averaging 9d. each, to retail at 1s. to 1s. 3d. each.  
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# PHARMACEUTICAL SOCIETY of IRELAND.

## EXAMINATIONS.

All Examinations are held during the months of January, April, July, and October—viz.:

The Preliminary Examinations on the FIRST TUESDAYS.

The Pharmaceutical License Examinations on the SECOND WEDNESDAYS and following days.

The Pharmaceutical Assistants Examinations on the SECOND MONDAYS.

The Registered Druggist Examinations on the SECOND TUESDAYS.

*All Applications must be lodged with the Registrar, and fees paid, a clear fortnight before the dates of the respective Examinations.*

## PHARMACEUTICAL SCHOOLS OF CHEMISTRY, BOTANY, AND MATERIA MEDICA.

THE Chemistry School is under the direction of Professor TICHEBORNE, LL.D., F.I.C., L.R.C.S.I., and Diplomate in Public Health, assisted by Mr. P. KELLY, M.P.S.I., and Mr. F. N. BINKS, F.C.S., late "Young" Scholar of Anderson's College, Glasgow.

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